



SEEK WISDOM, ELEVATE YOUR INTELLECT AND SERVE HUMANITY!



Addis Ababa University

Technology Transfer Implementation Guideline

(Draft 01)

June, 2022

Addis Ababa, Ethiopia

Contents

SECTION ONE: GENERAL	6
1. Introduction.....	6
1.1. Sources of information and methods.....	7
1.2. Good Practices on Technology Transfer.....	8
1.3. Innovation and Incubation in Research Universities.....	9
1.3.1. The Technology Business Incubation Center (TBIC) in AAU	9
1.3.2. Global Experiences	10
1.4. Engagement of Internal and External Stakeholders	11
1.4.1. Relevance of Stakeholder Engagement.....	11
1.4.2. Stakeholder Analysis	12
1.4.3. Strategies on Stakeholder Engagement	12
SECTION TWO: GENERAL PROVISIONS	13
2. Rationale	13
3. Purpose of the implementation manual.....	13
4. Short title.....	14
6. Scope of applicability.....	16
7. General and specific objectives.....	16
8. Principles.....	17
SECTION THREE: MAIN PROVISIONS	19
9. The Technology Transfer Channels and Process.....	19
9.1. Customized TT workflow/procedure	20
10. Intellectual property right (IPR) management	27
10.1. Invention Disclosure, Patent Protection and Commercialization	27
10.1.1. Invention Disclosure.....	27
10.1.2. Patent Protection and Commercialization.....	29
10.2. Distribution of incentives from patent commercialization.....	30
10.3. IP from tenants admitted in the TBIC	31
10.4. Distribution of incentives from startups of the TBIC.....	31
10.5. Other Incentives for TT Actors within AAU	32
SECTION FOUR: ORGANIZATION AND HIERARCHICAL RELATION.....	33

11. Organization Structural and Hierarchical Relation.....	33
12. Duties and Responsibilities of Key Actors in the TT Process	33
12.1. Duties and responsibilities of key actors in the University.....	33
12.1.1. Major duties and responsibilities of ILTT director	33
12.1.2. The specific duties of the ILTT director	33
12.1.3. Duties and responsibilities of associate deans/vise-directors.....	34
12.1.4. Duties and responsibilities of ILTTO IP Expert	35
12.1.5. Duties and responsibilities of TBIC Expert	36
12.1.6. Membership, Duties and Responsibilities of TAC members.....	37
12.1.7. Duties and responsibilities of TBIC tenants.....	38
12.2. Duties and responsibilities of TBIC coaches/mentors/trainers	39
12.3. Duties and responsibilities of technology recipients (Industry and Community).....	39
12.3.1. Duties and responsibilities of the industry	40
12.3.2. Duties and responsibilities the community	40
SECTION FIVE: MISCELLANEOUS PROVISIONS.....	41
13. Reporting system	41
14. Formats and directions	41
15. Enforcement.....	41
16. Implementation	41
17. Version Control.....	42
SECTION SIX: APPENDICES (FORMATS AND TEMPLATES)	43
Appendix 1: Planning for TT Initiation/Pre-Incubation Activities.....	44
Appendix 2: TT Project Proposal/Startup Pre-Screening	45
Appendix-3: TT Project Proposal/Startup–Main Selection Format.....	46
Appendix-4: Selection of TBIC Customers for Post-Incubation Service	48
Appendix-5: Selection of Ad-hock TBIC customers.....	49
Appendix-6: Startup/Tenant -TBIC Contract Agreement	50
Appendix-7: Invention Disclosure	56
Appendix-8: Patent License Agreement.....	58
Appendix-9: TT Procurement Request/Plan of Tenants Hosted at AAU- TBIC.....	61
Appendix-10: Tenant Coaching/Mentorship Request	64
Appendix-11: Tenant Coaching/Mentorship Report	66

Appendix-12: TT Project/Startup Progress Reporting.....	68
Appendix-13: Templates for Engagement of Internal and External Stakeholders.....	72
Appendix-14: Templates for Analysis of Internal and External Stakeholders	74
References.....	76

List of Acronyms:

AAiT	Addis Ababa Institute of Technology
AASTU	Addis Ababa Science and Technology University
AAU	Addis Ababa University
CoEE	Center of Excellence for Entrepreneurship
CEO	Chief Executive Officer
CHS	College of Health Sciences
CNCS	College of Natural and Computational Sciences
EIPA	Ethiopian Intellectual Property Authority
FBE	Faculty of Business and Economics
GIZ	Gesellschaft für Internationale Zusammenarbeit (German Development Agency)
HEI	Higher Education Institution
HETRIIL	Higher Education and Training, Research Institutions and Industry Linkage
ILTT	Industry Linkage and Technology Transfer
ILTTO	Industry Linkage and Technology Transfer Office
IP	Intellectual Property
IPR	Intellectual Property Right
MoE	Ministry of Education
MInT	Ministry of Innovation and Technology
PG	Post Graduate
STI	Science, Technology and Innovation
TAC	Technical Advisory Committee
TBIC	Technology Business Incubation Center
TT	Technology Transfer
UG	Under Graduate
UNCTAD	United Nations Conference on Trade and Development
UIL	University Industry Linkage
VPRTT	Vice President for Research and Technology
WIPO	World Intellectual Property Office

SECTION ONE: GENERAL

1. Introduction

Addis Ababa University (AAU) is the oldest, biggest and best ranked University in the country. Its core functions encompass the three pillars of research, education and community engagement. Recently in 2019, due to its significant progress in research outputs, AAU has become one of the top ten universities in Africa, and aspires to become a world-class research University by 2030. In addition, AAU aspires very soon to exercise self-autonomy, hence it shall device mechanisms for proper integration of innovative technology development and transfer activities in to its core revenue generation functions. This brings an added value in terms of fostering the innovation culture of the University community and solving industrial and societal challenges with mutual benefit.

However, the reputation in research output is yet to extend to technological inventions, scientific innovations, and dissemination of these to potential beneficiaries (the industry and community) through technology transfer (TT) and commercialization. Due to its rich research expertise and strategic location (in the capital), home to public and private institutions/organization, industries/parks, innovation hubs, and growing entrepreneurial-ecosystem, AAU could play a catalytic role by responding with innovative technology transfer activities.

One way to achieve this is to align the strategic focus with resources and efforts allocated towards strengthening the innovation and incubation activities in the University, such as the technology business incubation center (TBIC). In addition, AAU needs to play key role in creating favorable conditions/opportunities to foster the creativity, innovation and entrepreneurial culture of its community (staff and students alike).

Recently (in 2020), the United Nations Conference for Trade and Development (UNCTAD) undergone a review on Ethiopia's science, technology and innovation (STI) policy. The review appreciated the presence of policies, regulations and roadmaps, while pointing out series gaps in the implementation due to limitations in capacity or misallocation of efforts and resources. The review further highlighted that the country's STI policy gives priority to technology transfer from abroad rather that shifting attention to local technological innovation from national initiatives (such as the industry parks).

The ministry of education through its directive for technology transfer (2021) has granted the mandate to higher education institutions (HEI's) of the country to "*set their own institutional strategies, plans, and procedures for the effective and sustainable technology transfer*". AAU has already incorporated TT in to its core functions and structure through what is currently known as the University-industry linkage and technology transfer offices (ILTTO).

AAU has recently (2021) developed a University-industry linkage policy. However, it doesn't possess any TT policy and the corresponding implementation manual. This manual fills the gap

by incorporating good TT practices from HEI's in developed and developing countries as well as from similar HEI's in Ethiopia.

Key aspects in this manual include the detailed procedures for evaluation/selection criteria of innovative technology proposals (based on technical feasibility, financial viability, and customer desirability aspects); technology development (admission and support for prototyping in the TBIC); and the technology transfer to target users (industry and community).

The main goal of this implementation manual is to facilitate the technology transfer and innovation culture in AAU so that both the technology donor (AAU-ILTTO) and the recipients (industry and community) shall have fair and mutual benefits. The manual shall be used to guide the overall TT processes starting from the pre-incubation/initiation, selection, technology incubation, development and transfer functions of the TBIC that is being managed by the ILTTO.

In a nutshell, the manual provides guidance on what the core TT activities of ILTTO are, who the key actors are and their roles and responsibilities, how the TT workflow streams from initiation to dissemination (to industry/community), how the intellectual property rights are protected, commercialized and utilized, along with relevant procedures and formats.

1.1. Sources of information and methods

The documents consulted/assessed as sources of information during the preparation of this guideline include (internal to AAU): Senate legislation, 10 years strategic plan, TBIC establishment document, policies (for IP, University-Industry Linkage Policy, and Student Career Development Center), guidelines (for Community Engagement and Research Incentives), revitalizing innovation and incubation (draft). External to AAU documents assessed include: directives, regulations, and guidelines from national ministries (MoE and MInT), and related literature (research publications and reports) focusing on technology transfer from HEI's.

Formal and informal communications and specific websites were used to access information on the good practices of selected higher education institutions within the country and from the developed and developing countries.

Using desk review and unstructured/informal interview, data was collected from experts and practitioners of TT and incubation activities of national and international HEI's, and internally the informants are from AAU's ILTTO team, selected tenants of the TBIC, and selected academic staff of AAU. Furthermore, observations of the facilities and analysis of current operational documents used by the ILTTO for TT and TBIC activities were conducted.

1.1.1. Brief overview of document analysis

Unlike its other core missions (research, teaching and community engagement), AAU's Senate legislation (2019) doesn't explicitly specify TT activities to be considered in staff promotion evaluation criteria, or workload of appropriate level, except article 36 which is about the inventions of functional designs that shall apply to academic staff from the School of Fine Arts and Design.

On the other hand, the recent 10 years strategic plan (2021) admits AAU's "weak culture of innovation and technology transfer" and states that "*the University promotes the development of innovative ideas that are marketable and that address societal needs*". Although it remains as one of the core values of the University's strategic goals, there is lack of clarity and detail on technology transfer strategy.

The Ministry of Education Directive for Technology Transfer (2021), gives responsibility to HEI's to "*create, adopt and/or adapt technology transfer implementation guideline that synchronized the technology transfer with teaching and research*". In addition, it grants the mandate to HEI's of the country to "*set their own institutional strategies, plans, and procedures for the effective and sustainable technology transfer*". However, it neither specifies TT initiatives to be considered in staff promotion, nor does it express availability of special funding for TT activities in HEI's.

According to the Higher Education and Training, Research Institutions and Industry Linkage (HETRIL) regulation 2021, section 22/1 of Ethiopia, technology transfer agreements between a HEI's and the industry shall be registered by the Ministry of Trade and Industry.

With respect to the incentives for inventors, in particular, the distribution of revenue generated from IP commercialization, is not encouraging. For instance, AAU IP policy (2015) asserts that "*the inventor's share shall never be less than 30% of the net income*". Accordingly, the net revenue from IP commercialization is to be distributed to the different actors based on the following proportions: 50%, 30%, 10%, and 10% of the net revenue goes to the inventor, the central University's, the College/Institute, and the School/Department/lab of the inventor, respectively. On the other hand, the recently (2021) released Higher Education and Training, Research Institutions and Industry Linkage (HETRIL) regulation 2021 of Ethiopia, states a different royalty distribution scheme, which rather favors the inventor to take 70% of the net revenue.

For startups successfully graduating from the TBIC, the existing TBIC establishment document (2013) asserts that, the startups shall "*allocate about 5% of the share of their business*" to AAU. This assertion has no justification (why 5%) and clarity (whether from gross or net, when and how, etc.). For startups leaving the TBIC with a prototype and having not raised enough seed fund, or developed their product and customer, they would most likely struggle to barely survive in competitive market. The TBIC document needs to be updated to be aligned with the current 10 years strategic plan of AAU and the national priority areas.

1.2. Good Practices on Technology Transfer

The level of TT activities in higher education environment is usually measured in terms of the number of patent protections, invention disclosures, license agreements, and successful start-ups from their TBIC. Based on the successful experience on research commercialization through TT of Tel Aviv University (TAU), Israel, the world intellectual property organization (WIPO)

recommends the following core points as essential conditions that are required for an effective and sustainable technology transfer system:

- 1) Availability of adequate national and institutional intellectual property (IP) laws and regulations that favors fair IP ownership and utilization
- 2) Availability of national and institutional innovation strategy that fosters research commercialization through technology transfer
- 3) Strong University-industry linkage on top of robust institutional technology transfer policy and implementation strategy
- 4) Strong culture of scientific research with potential technological applications that could create socio-economic impact to the end users
- 5) Strong culture of academic entrepreneurship among the University community
- 6) Commitment of the University in allocating key resources (human, financial, infrastructure) to effectuate the TT activities and place it among its core strategic focus areas
- 7) Commitment and skill of the TT staff in properly managing IP rights and fair allocation of income and incentives
- 8) Strong engagement with the community and industry for mutual benefit

1.3. Innovation and Incubation in Research Universities

1.3.1. The Technology Business Incubation Center (TBIC) in AAU

The ministry of education directive for research and technology transfer (2017), in its article 46 mandated HEI's in Ethiopia to “*shall establish technology or business incubation centers in order to support their academic staff, students, other employees or other persons who are desirous of developing their technologies into businesses*”.

AAU established its pilot-TBIC a decade ago to foster the creation of technology-based startups from AAU's researchers. Only 11 projects could have been accommodated with few measurable outputs achieved in the course of 9 years. This is mainly due to lack of capacity and infrastructure, limited fund and resources, low academic entrepreneurial culture and experience, and low attention/priority as a strategic focus.

AAU is lagging behind to play its key role and create favorable opportunities for its creative staff/students, although is rich in expertise and located in the capital, home to public and private institutions/organization, innovation hubs, and growing entrepreneurial-ecosystem.

Currently the services in the TBIC include co-working spaces (which is below standard), internet services, facilitation of IP rights, trainings on entrepreneurship and business development, coaching/mentoring, lab/workshop facilitation within AAU, and market linkage and exhibition events organization.

The TBIC needs a renovation including a guideline in line with current the 10-years strategic plan, and institutional and national priority areas, a sustainability framework (business plan) with clear vision, mission, role, quantifiable objectives and organizational structure to achieve these. With regard to the naming of the center, the current “Technology Business Incubation Center (TBIC)”, could be misleading as if it is only for technology (engineering) fields. Hence, it is much inclusive and attractive to give it a generic name, such as “Business Incubation Center (BIC)”, or “Innovation and Incubation Center (I&I-C)”. If there is a need in the future to establish such mini-innovation centers at a college/institute level, then each shall have a prefix (of their choice) that better describes their specialty, for instance:

- 1) “Science Innovation Center” (in the CNCS)
- 2) “Technology/Engineering Innovation Center (transform the existing “Innovation Center” in the AAiT)
- 3) “Art and Social Sciences Innovation Center” (in the Main Campus)
- 4) “Entrepreneurship and Innovation Center” (or use the existing “Center of Excellence for Entrepreneurship (CoEE)” in the FBE)
- 5) “Health(care) Innovation Center” (in the CHS), etc.

1.3.2. Global Experiences

Among the key indicators of the innovation outcomes of a research University include the quality and quantity of successful knowledge and technology transfers, patents, and inventions with significant socio-economic impacts. In a closely related way, University incubators measure success by the number of successful startup companies supported; commercialized research, technology commercialization via IP (patent); amount of revenue generated (through licenses sold, equity fund raised, royalty, etc.); and number of direct and indirect jobs created/supported.

The synergy between research and innovation can best be seen in the success story of University College Dublin (UCD), Ireland. Under UCD’s research and innovation, we find an incubator (called “NovaUCD”), mainly responsible for the commercialization of cutting-edge research outcomes and knowledge intensive activities of the University. Over a decade and half, it has achieved 2,100 million direct and indirect jobs supported, €775 million equity funding raised, 400+ companies and early-stage new ventures supported.

Most of the startups in UCD get seed fund from a unique public-private-partnership that includes public enterprises (Enterprise Ireland and Science Foundation Ireland), banks, and industries that support the early phase of product/service development.

UCD uses a panel of mentors and business partners “*aimed at getting experienced business leaders to preview and engage with new inventions and business propositions. The purpose of the panel is*

to enhance the commercial propositions, to mentor the teams, to invest in them or even take the lead as CEO to bring them to market”¹.

The pre-incubation activities are highly supported by an on-campus innovation hub known as “UCD innovation academy”. This academy, established by multidisciplinary teams, plays key role by providing educational, motivational and interactive platforms for aspiring students and staff to develop and experience an innovative/entrepreneurial mindset and skills. The academy is famous in creating awareness and participation through innovation activities and programs that go to the extent of providing elective courses/modules.

In summary, the following good practices are worth learning from UCD:

- 1) Accommodation of companies from an early-stage, high-tech start-ups to established innovation-led inventions coming from research
- 2) Dedicated support for IP commercialization of research and knowledge intensive activities
- 3) Existence of a unique public-private-partnership for funding startups
- 4) Provision of consultancy to industries and business to generate revenue
- 5) Existence of a panel of mentors and business partners to facilitate the startup journey from screening to market link
- 6) Strong support of innovation academy through multidisciplinary collaboration
- 7) Revenue generation from companies spinning-out of and spinning-into the incubator

1.4. Engagement of Internal and External Stakeholders

1.4.1. Relevance of Stakeholder Engagement

Strong partnership with the business ecosystem, as also implied in UN sustainable development goal (SDG #17), is no longer a choice but a means of survival for a 21st century research University aspiring to exercise self-autonomy. It wouldn't be an easy ride to achieve a world class innovation and incubation mission together with the other three missions of the University (research, teaching and community services). This is mainly due to the competition of programs/activities for limited resources/facilities of the University and due to the nascent level of the culture of innovation and academic entrepreneurship.

Increasing the intensity and frequency of collaboration with external partners/stakeholders - “the business ecosystem”- is relevant for AAU incubator's financial sustainability, to create opportunity for prototyping, getting business development support, and market link for startups and IP commercialization.

¹ <https://www.ucd.ie/innovation/knowledge-transfer/innovative-business-opportunities/>

1.4.2. Stakeholder Analysis

The guiding principle for increasing the intensity and frequency of collaboration with external partners/stakeholders is maximizing the financial sustainability as an essential part of the incubator's strategy. The stakeholders can be categorized according to the level of impact and contribution they have on the incubator. The highest being those partners having potential contribution such as supply of trainers, mentor/coaches, finance, technical/prototyping, and market link. The frequency and strength of collaborative engagements should be on a win-win basis so that the University shall keep its scholarly and research reputation as well as create sustainable socio-economic impact.

The ILTT director shall make periodic analysis of potential internal and external stakeholders that will assist the incubation center of AAU in its TT activities. The analysis involves periodically prioritizing/ categorizing their relevance (from highest to lowest), mapping their contribution types (as suppliers of training, mentorship, finance, technology/facility for prototyping, and market link for IP/research commercialization) along with drafting the anticipated collaboration frequency/strength. The Table A-3 in appendix 14 is provided as a tool/template to be used by the ILTTO for the analysis of potential internal and external stakeholders that will assist the incubation center of AAU in its TT activities.

1.4.3. Strategies on Stakeholder Engagement

It is the duty and responsibility of the ILTT team to plan and implement the following stakeholder engagement mechanisms:

- 1) attract industry experts/professionals through a memorandum of understanding (MoU) and joint University-industry professorship positions, which is allowed by AAU's Senate legislation
- 2) co-operative involvement of the business/startup ecosystem by organizing trainings, consultancy services, research and development (R&D) services, impact assessment and market research for SMEs
- 3) establish partnerships with national and global innovation and incubation centers through MoU
- 4) organize joint events (conferences/forums, virtual mentorship/coaching schemes, etc.)
- 5) organize industry sponsored co-innovation challenges/competitions

In order to maintain/sustain the established partnerships, periodic satisfaction surveys/reviews need to be conducted by the ILTT team. Internally, the ILTTO should involve center of excellences, institutes, labs and workshops through mutual schemes. Such a scheme could be sharing revenue generated through internal co-innovation alliances that support the development of prototype. Table A-2 in appendix 13 gives summary of internal and external stakeholders along with the goals and strategies for engagement.

SECTION TWO: GENERAL PROVISIONS

2. Rationale

Universities in developing countries need to cope up with the current pace of technology evolution as well as address the growing needs and challenges of the industry and the community with innovative technologies that create mutual benefit. To this cause, AAU has to push the frontiers of its traditional TT practices to be up to date, in line with its 10 years strategic plan and meet international standards. AAU already has an IP policy and a university-industry linkage policy developed in 2015 and 2021 respectively, however, it has currently no policy and the corresponding implementation guideline on technology transfer.

To fill this gap, it is therefore required to develop a full-fledged TT implementation manual by incorporating good practices on TT from HEI's in developed and developing countries as well as from similar HEI's in the country. Since innovative solutions addressing societal and industrial challenges could emerge from different disciplines, it is worth having a TT policy and guideline that facilitate the effective and sustainable technology transfer activities across all units of AAU. Availability of a TT guideline will facilitate the ILTTO in the selection, incubation, development, and commercialization functions of the TBIC, thereby promoting business start-ups to flourish.

An institutional procedure also guides the ILTTO to play intermediary role between the technology donor (IP owner and the units in AAU) and the technology recipients (industry and community) so that the revenue generated in the TT process will be distributed fairly and transparently to the contributing actors.

3. Purpose of the implementation manual

The purpose of this implementation manual is:

- 3.1.1.** To foster the culture of innovation and technology transfer in AAU
- 3.1.2.** To facilitate University wide TT process to be applicable to all units of the University
- 3.1.3.** To provide a framework for effective implementation of technology transfer policy of AAU
- 3.1.4.** To provide mechanisms on IP management and fair distribution of income among the key parties (inventors and the University) through royalty and IP license
- 3.1.5.** To guide the overall technology selection, development and transfer functions in AAU-TBIC in the pre-incubation, incubation, and post-incubation phases
- 3.1.6.** To contextualize a TT workflow and the corresponding implementation mechanisms with references for formats and templates to be used

3.1.7. To facilitate formation of start-up companies from AAU-TBIC

3.1.8. To promote AAU community’s contribution towards the national and local socio-economic development

4. Short title

This manual may be referred to as **“AAU Technology Transfer Implementation Manual, Ver. 01/2022”**.

5. Definitions of terms and expressions

The following terms and expressions in this manual shall have the following meanings, except where the context of the term requires otherwise:

- 1) “Academic staff” means an individual who has formal employment, appointment, or affiliation with AAU as approved by AAU Senate legislation;
- 2) “Beneficiary” means an industry or community that benefit from the TT process;
- 3) “Co-innovator” means any individual, either affiliated to AAU as staff or student or not, who has contributed to or participated in the crucial aspect of the innovation during the technology development process;
- 4) “Community” means people with any economic and/or social status that make use or benefit from the TT process from AAU;
- 5) “Commercialization” means the process of revenue generation as a result of a TT process to the innovators, the University, and the end users, for instance through IP licensing, royalty fee, etc.;
- 6) “Donor” means an individual or team from AAU or ILTTO that produces the relevant technological innovation to be transferred to the end user;
- 7) “Mediator” means University industry-linkage and technology transfer office that participates in facilitating the effective transfer of technology from the donor to the recipient;
- 8) “Incubation” means the process of supporting the development of start-up companies by providing the necessary facilities and services within the University premise;
- 9) “Industry” means any private or public company working for profit and makes use of the technology developed from AAU and introduces it to the market for public use;
- 10) “Innovation” means any service or product that is either new (disruptive) or improved (incremental) that is introduced to solve societal or industrial challenges and also generates revenue;
- 11) “Innovation Process” means the process that a technology innovation shall pass in order to meet the technical feasibility, financial viability and customer desirability requirements;

- 12) “Innovator” means any academic staff or student of AAU that participated through research or other independent or joint efforts in the TT process to be transferred to the community or industry;
- 13) “Intellectual Property (IP)” means any creation of the mind such as inventions, which includes mainly patents, copyrights, industrial designs/models, trademarks, and trade secrets;
- 14) “Intellectual Property Right (IPR)” means all legal rights given to the IP owner by the laws of the country, allowing the IP owner to exploit/benefit from the IP possession and prevent/stop any unpermitted make, use or sale of a product or service that infringes the IP;
- 15) “Intellectual Property Protection” is the process of registration of IP and preserving its ownership rights by the IPR law of a country in the form of patents, trademarks, designs, and copyrights;
- 16) “License” means the process of granting full or partial permission on IP utilization to a third party (non-IP owner) through formal agreements for mutual economic benefits/revenue sharing;
- 17) “Pre-incubation” means the first stage of the business incubation journey to be taken by startups aspiring to join the incubation center. The activities/services provided to the candidates mainly focus on checking the technical and financial feasibility of innovative ideas, and team dynamics aspects followed by the necessary support for preparing a business model/plan;
- 18) “Recipient” means industry or community that is the end user or beneficiary of the technology developed by the University;
- 19) “Royalty” means a sum of money which is calculated as a percentage of net revenue and payable by licensee to the IP owner under the provisions of the license agreement;
- 20) “Start-up” means a newly established business in its early-stage, passing through the University’s TBIC, which provides resources, business development services/skills, and fund for prototyping. The University, through agreement with the start-up, receives income by sharing future profit of sales;
- 21) “Student” means any person, who is formally registered at AAU at the time of the technology innovation and, who is studying or researching either at undergraduate or postgraduate level as recognized by AAU Senate legislation
- 22) “Customer” means an industry, or private/public institution/organization, or community that makes use of or benefits from the TT process from AAU and in return contributes to the revenue generation;
- 23) “Technology” means any physical or non-physical product/service, or technical knowledge/know-how that is developed in the University to solve societal and industrial challenges;

- 24) “Tenant” means an individual admitted in the TBIC to get support for the development of a start-up company through mutual agreement with the University;
- 25) “Technology Transfer (TT)” in this context means collaborative activity that involves handing over physical or non-physical asset, technical knowledge or know-how, developed in the University to its target user (community and industry) that involves commercialization and subsequent revenue generation to the innovators and the University;
- 26) “Technology Transfer process/workflow” the mechanisms to transform research results from the University into commercial innovation that involves initiation, selection, development, commercialization, and transfer of the technology;
- 27) “Technology Business Incubation Center (TBIC)” means a center providing the necessary resources, facilities and services within the University premise to facilitate the development of start-up companies by the University community;
- 28) “University” or “the University” refers to AAU or its units or the ILTTO as appropriate;

6. Scope of applicability

This guideline applies to TT activities that involve AAU’s academic staff and students from all units (institutes, colleges, schools) of AAU that shall participate in the TT activities of managed by the ILTTO. This also includes any technology arising from either individual effort or through inter-/cross-disciplinary collaboration within AAU, or through national and global collaboration with governmental or non-governmental institutions, or private sectors provided that the TT process applies to/involves AAU and end users (communities or industries) in Ethiopia, where the national science, technology and innovation policy as well as the technology transfer directive and regulation of Ethiopia shall be applicable to.

The implementation manual is specifically applicable to the following actors within AAU that contribute or participate directly or indirectly in the TT process either independently or jointly:

- 1) Academic staff employed as full-time, part-time, adjunct with other HEI’s, visiting professor or industry appointed staff, or to the following staff category in AAU (as recognized in AAU’s Senate legislation): Administrative, ICT, Technical, Supportive, and Clinical staff.
- 2) The TT implementation guide also applies AAU students formally register as regular, summer, extension or distance be it undergraduate or postgraduate level as recognized in AAU’s Senate legislation.

7. General and specific objectives

7.1. General objectives

The general objectives of this TT implementation manual are:

- 7.1.1. to guide the overall TT activities in AAU and foster the culture of technological innovation that solves societal and industrial challenges
 - 7.1.2. to formulate framework for successful technology transfer mechanisms that mutually serve the technology provider (the University and the innovator) and the recipients (industry/community)
 - 7.1.3. to provide a comprehensive framework for a university wide TT process from the TBIC to industry and community
 - 7.1.4. to formulate proper mechanisms for a university wide IP management for a fair and justified distribution of income generated through IP commercialization
 - 7.1.5. to provide guideline, which is consistent with institutional and national legal and binding frameworks, for revenue sharing upon technology commercialization through IP licensing and startups of AAU TBIC
- 7.2. Specific Objectives**
- 7.2.1. to provide detailed procedures for the implementation of TT policy applicable to the various units (institutes, colleges, and schools) of the University
 - 7.2.2. to provide guidance on the overall technology transfer functions in AAU-TBIC in the pre-incubation, incubation, and post-incubation phases
 - 7.2.3. to contextualize a TT workflow (initiation, selection, development, commercialization, and dissemination) and the corresponding implementation mechanisms with references for formats and templates to be used
 - 7.2.4. to establish practical guide on IP protection and utilization consistent with the institutional and national IP policies
 - 7.2.5. to facilitate income generation and sharing mechanism of AAU community that participate in innovative technology development and commercialization activities
 - 7.2.6. to provide guidance on the duties and responsibilities of the different actors and beneficiaries within and outside AAU in the TT process

8. Principles

The following principles shall govern the technology initiation, selection, development, dissemination, and commercialization processes from AAU to the concerned end users (community and industry):

- 8.1.1. The technology selection and development at the institution level should be motivated by real societal and industry challenges which eventually create socio-economic impact that mutually benefits the different actors in the TT process;
- 8.1.2. The TT activities shall be complementary and integral part of AAU's key functions of research, teaching and community engagement;
- 8.1.3. Key resources (human, financial, infrastructure) with commitment and efforts shall be allocated by AAU for an effective and sustainable technology transfer process;

- 8.1.4.** The TT activities shall be centered around the University's priority areas and research reputation to best leverage mutual benefits between different actors;
- 8.1.5.** ILTTO shall provide advocacy and assistance to AAU community on IP policy and shall remain committed in properly managing IP rights subsequent allocation of the revenue through fair and transparent procedures;
- 8.1.6.** The level of TT activities in AAU shall strive to maximize the number of patent protections, invention disclosures, license agreements, and successful start-ups from its TBIC;
- 8.1.7.** A strong culture of academic entrepreneurship remains vital among the University community to increase the quality and quantity of TT initiatives in the TBIC;
- 8.1.8.** Partnerships and engagements shall be built and strengthened with the community and industry through periodic assessment of the business/commercial opportunities, market links, and business development services;
- 8.1.9.** Assessment of internal and external environment and stakeholders shall be done so that best practices on TT process shall be kept while challenges identified are addressed timely;
- 8.1.10.** Maximum effort shall be put to assess the viability and potential development of the technology innovation before disseminating to its end users;
- 8.1.11.** AAU shall put the right quality control mechanisms to enforce the effectiveness and sustainability of TT activities, to promote the reputation of AAU, and to assure the desired impacts are achieved;
- 8.1.12.** The University shall discourage any informal and ILTTO unauthorized TT activities and IP utilization by any unit in AAU, colleges/institutes, or individuals (staff members and students) that significantly utilize the resources (such as funds and facilities) by disregarding the TT policy and possible IPR revenue share of AAU;

SECTION THREE: MAIN PROVISIONS

9. The Technology Transfer Channels and Process

According to the world intellectual property organization (WIPO), the three main mechanisms or channels of technology transfer are:

1) Industry sponsored and University-industry cooperative researches

In this model, research could be fully funded by the industry and suited to serve mainly the industry's interest with an intention of having the license (unless agreed otherwise) to use the innovative result for commercial purpose with non-exclusive and royalty-free rights. The disadvantage comes with non-disclosure agreement, placing confidentiality restrictions on the innovator/University to disclose the research output/innovation to the public and academic purposes. If the research is jointly funded by the University and the industry, then the University may have the right to IP ownership, unless agreed otherwise. The advantages include strengthening the University-industry linkage, providing industrial experience for researchers, and providing funding for further research.

2) IP commercialization through license agreement

This involves the different parties (the patent owner, the University through its ILTTO, and the industry) to enter into an agreement granting license to use the IPR for commercial purpose. The agreement may grant exclusive or non-exclusive rights the industry. The industry takes the responsibility of developing and commercializing the technology and sharing the profits with the University and the IP owner. In case the industry requires further research and development of the product at the University, it shall be included in the license agreement to be signed. The University and the innovator(s) later benefit from royalties on sales. The drawback is the restrictions of accessing a patented research output for internal academic and research publication purposes.

3) New company creation in the form of start-up

This mechanism involves developing a company from research or by start-ups in the TBIC, where the innovator(s) own the company and the University through its shares in the company will benefits from future profit of sales. The difficulty with this model is the requirements on resource, skills and time to launch a new startup company into a competitive market.

The first two TT mechanisms have already been recognized in AAU through the University's IP policy (2015) and the University-industry linkage policy (2021), although there is no up to date and detailed implementation guideline. The AAU TBIC establishment document (2013), describes further TT channels, such as consultancy, student industrial internship.

9.1. Customized TT workflow/procedure

A technology transfer process involves the movement of innovative products/services, technical knowledge, intellectual properties, discoveries, or inventions from research or other initiatives of the University to its target user (community and industry). The process itself is a collaborative activity that involves handing over physical or non-physical asset, technical knowledge or know-how, developed in the University to the benefit of society. The commercialization aspect involves revenue generation to the innovators and the University either through IP licensing to existing industries or from the sales of products/services of startup companies hosted at the University's TBIC.

At this point, it is worth appreciating the initiative took by the Sustainable Training and Education Program (STEP) of the German Organization for Cooperation (GIZ), in collaboration with MoE (2017) to develop a TT workflow/ procedure². This was a joint effort that also involved ILTT directors and officers of selected Ethiopian Universities and institutes of technologies with the support of international and local consultants. The effort produced TT policy and guide suitable for the context technology institutes of Ethiopian Universities. The TT workflow has been modified/ customized for AAU's context (as shown in the Figure-1 below). Modifications include inclusion of TT initiatives emerging from ad-hock applications and non-engineering disciplines, since emphasis was given to the institute of technologies.

The “Directive to define the roles and responsibilities of the actors in Higher Education and Training, Research Institutions and Industry Linkage (HETRIIL) towards technology transfer, 2021” states under section 15, that HEI's shall be responsible to develop and adapt their own internal TT workflow from initiation to commercialization.

A typical TT workflow includes: initiation, preparation/selection, development, commercialization, and dissemination phases. The TT process from startups going through the TBIC involves: pre-incubation, early-stage incubation, later-stage incubation, and post-incubation phases (as shown in Figure-1 below). In general, the TT process starts either with the announcement for the innovation call by ILTTO or with the inventors directly approaching the ILTTO on their own initiatives. In either case, if the TT involves any IPR, then the procedure shall proceed as follows: invention disclosure, assessment of patentability, patent protection, patent commercialization through licensing, and subsequent revenue distribution. The following sections capture the main components/phases of the TT procedure along with details on the corresponding implementation mechanisms and references for formats and templates to be used.

² A Technology Transfer Procedure/Workflow for Ethiopian Universities, prepared by Sustainable Training and Education Program (STEP), The German Organization for Cooperation (GiZ), in collaboration with MoE, draft (2017)

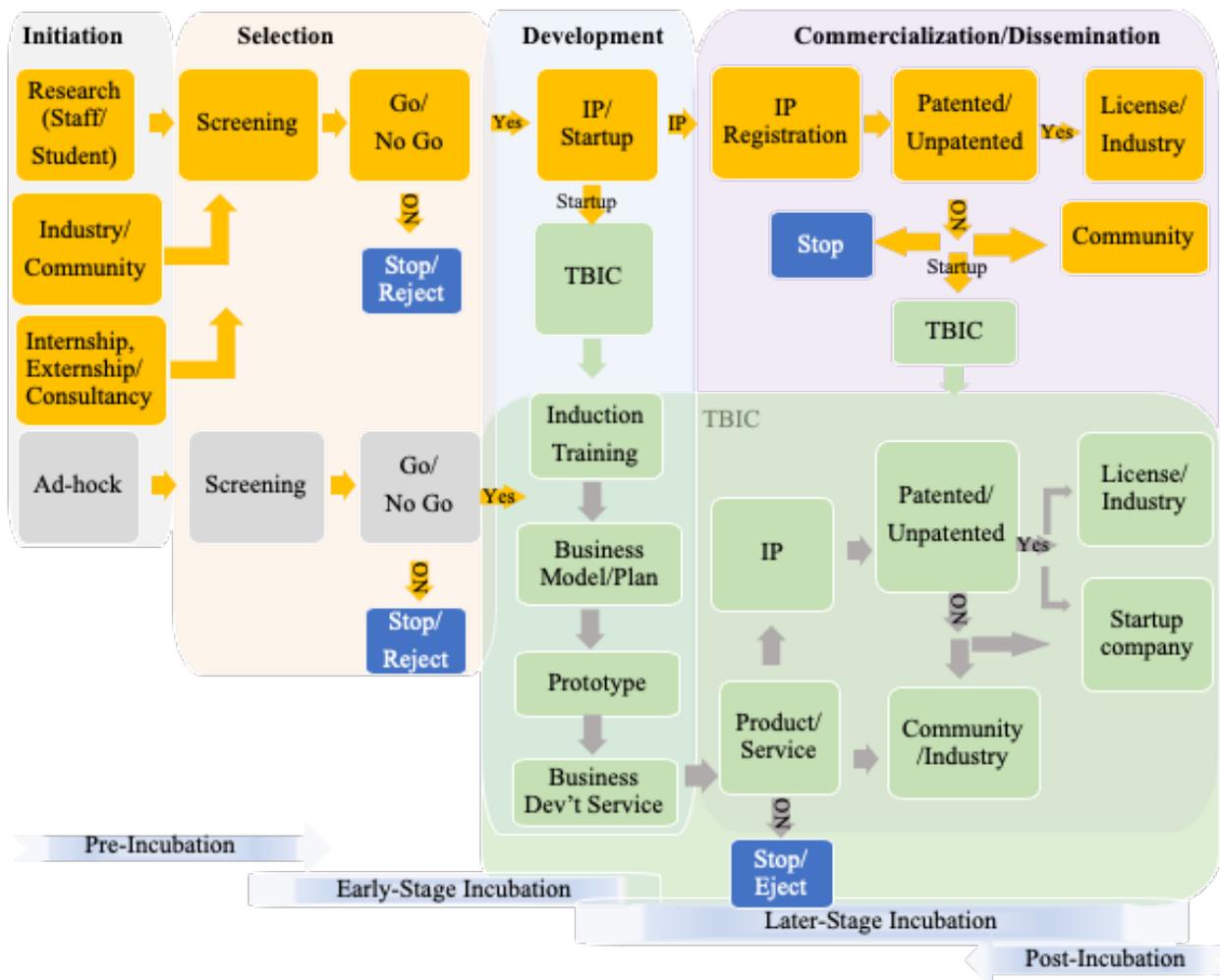


Figure-1: the different TT workflow/processes: initiation, selection, development, and commercialization/dissemination (refer text for details).

9.1.1. Initiation Phase/ Pre-Incubation

Technology transfer initiatives could emerge from research (adaptive, thematic, other national/international collaboration, etc.) or other activities (internship/externship, community engagement, consultancy service, or ad hock). The activities/services to be provided by the ILTTO at this stage shall focus mainly on creating awareness and motivation for AAU community about the opportunities and benefits of participating in the TT process. The goal shall be attracting the

best innovators/innovative ideas with highest socio-economic impact, valid technical and financial feasibility, and strong team dynamics aspects.

This stage could also be considered as a pre-incubation phase, which is the first stage of the business incubation journey to be taken by startups aspiring to join the incubation center.

The following key points shall be used to guide the ILTT directorate to implement the initiation stage of the TT process:

- 1) Increase the capacity and availability of the ILTTO staff with access to relevant information (such as industry/community technology needs, research outputs from AAU staff and students having the potential to pass the TT process)
- 2) Build good communication channels within and outside AAU to reach the critical mass through TT policy advocacy and awareness creation events, such as workshops/forums
- 3) Disseminate adequate information, provide transparent administrative and legal services, and allocate proper funding to assist in patent right protection and utilization for AAU innovators
- 4) Plan and organize periodic innovation competitions to attract and admit the best tenants into the TBIC
- 5) Inspire AAU community to build partnership and engaged with the community and industry by designing and implementing projects that favor TT

9.1.2. Guideline to plan promotional events at pre-incubation stage

The following points shall be used as guidance to plan promotional events at pre-incubation stage:

- 1) Promotional events shall be planned by ILTTO for every semester and annually
- 2) The plan shall consider the academic calendar of AAU
- 3) Semester breaks, summer semester and other suitable days such as job-fair, freshman week, and research week shall be used targeting AAU community
- 4) The ILTTO shall facilitate the required resources and facilities for the pre-incubation promotional events
- 5) The promotion event may include orientation session, motivational speech, distributing leaflet/brochures/banners, prototype demonstration by startups, advertising on the websites of AAU and ILTT, news outlet through social media, and main media (AAU-FM)
- 6) ILTTO shall assist formation of innovation clubs for students throughout the major campuses of AAU to raise awareness innovation, creativity and entrepreneurship
- 7) ILTTO shall prepare and disseminate fact sheet about the processes and services of the TBIC to internal and external stakeholders

- 8) ILTTO shall plan and organize annually a panel discussion, forum, and/or consultative meeting/workshop with potential stakeholders (inside outside AAU) to advocate on innovation opportunities and success stories, and strengthen partnerships
- 9) Following the feedback exchanged during the discussion/meeting/workshop, ILTTO shall perform immediate evaluative meeting and take constructive measures

9.1.3. Preparation/Selection Phase

The ILTTO has to adopt a clear and justifiable criterion for the selection technology transfer proposals weather it passes through the TBIC or not. The criteria shall take into account the limitation of resources (financial, human, infrastructure), the TT policy, mission, scope and goals of the ILTTO. These include: weather to prioritize technologies with economic or social impacts; weather to focus on the innovative ideas or the innovative teams including gender balance; weather to prioritize innovations from research outcomes or from other initiatives; weather to prioritize technology startups or include any discipline; weather the tenants stay long or short, until they produce prototype or start sales, etc.

Before a TT proposal passes to the next development phase, a strict selection criterion shall be used to evaluate the technical feasibility (know-how/skills, resource and activity match), financial viability (cost structure//revenue model), customer desirability (existence of real problem of customers and their desire/capability to embrace/adopt and pay for the innovation), and potential socio-economic impact of a technology (alignment with institutional and/ or national priority areas).

For a TT initiative going to be admitted to the TBIC, the business model and a full-fledged business plan shall be produced. Although the business plan on its own is not a guarantee to a successful business, it can serve as a standard due diligence checklist. It also familiarizes researchers with the language and process of venture creation.

The ILTTO shall use the following guidelines at the selection phase:

- 1) The ILTTO shall manage the selection together with technical advisory committee (TAC)
- 2) In the selection of startups, the TAC members, and in consultation the ILTT director, shall split into at least three groups based on their area of expertise. For instance, one group shall consist of experts with familiarity or experience of the discipline related to the technology proposed, the second group comprises those with experience in business development, and third group those having experience with the industry/customer development to which the technology is addressed. Later on, the views of each group shall be consolidated to help final decision.

- 3) The ILTTO shall encourage startups to frame their innovations using the business model canvas with nine blocks³: key value proposition, customer segments, customer relationships, key channels, key resources, key activities, key partners, and cost structure and revenue structure.
- 4) The startups going to the TBIC shall be selected if they have the highest growth/scalability potential, highest socio-economic impact, are in line with institutional/national strategic focus/priority areas (such as high job creation, foreign currency generation, import substitution, local availability of raw material, etc.).
- 5) The following specific application and selection procedures shall be used for innovation calls joining the TBIC⁴, weather the applications are made regular or ad-hock:
 - a) The ILTTO announces the innovation call through different channels. These channels may include: website of AAU and/or ILTTO (www.iltto.edu.et), AAU central staff email, posters/banners, etc.)
 - b) Interested applicants shall register for the competition and complete the application form provided by the ILTTO and submit it to the ILTTO within the specified period on the call
 - c) Short-listed eligible candidates nominated based on a preliminary screening criterion will take a two-days induction training on business modeling and planning
 - d) Upon completion of the induction training, contestants develop their business plan within a week or two weeks and submit it to the ILTTO for final competition
 - e) Contestants present and defend their business plan to the TAC (panel of judges composed of experts from relevant fields)
 - f) The jury selects the final viable projects based on criteria developed by the ILTTO
 - g) Appendices 1 and 2 provide templates for selection criteria to be used by ILTTO in collaboration with the TAC members
 - h) The ILTTO ranks the projects based on the consolidated results associated to each project and announce the winners
 - i) The AAU Research and Publication Senate Standing Committee endorses the projects selected to be hosted in the AAU-TBIC
 - j) Principal Innovators (PIs) and members of the eligible projects selected will sign a contract with the ILTTO and will be officially hosted at the AAU-TBIC at most for the duration of the tenancy
 - k) The ILTTO will provide facilities and resources required to incubate and develop the business technologies as well as capacity building services to the tenants through its Entrepreneurship Development Program

³ <https://www.strategyzer.com/canvas>

⁴ *Adapted from AAU ILTTO TBIC: "Call for Female-only Innovation Competition, 2022"*

9.1.4. Development Phase/ Incubation

An IP from the University may not necessarily have to pass through the TBIC. For instance, a patented IP may be licensed to an existing industry or even lead to new business opportunity/venture creation. It is strongly recommended to use the design thinking method that involves the non-linear feedback loop of empathizing (with the customer)-defining (the real problem)-ideation (with creative and innovative solutions)-prototyping (with minimum viable product)-testing (to the customer for feedback). Once the innovation road map is framed using the business model canvas, startups shall be encouraged to adopt the lean startup approach. This approach aims at shortening product development cycles and determines whether the proposed business model is valid on product-market fit level as quickly and as cheaply as possible by building minimum viable product (MVP). The MVP helps to focus on customer-driven product development, where key features are captured and quickly tested through feedback loop. For a University TBIC with limited resources this helps to: reduces length of time to stay in the incubator; maximize efficiency of fund allocation and usage for prototype development; reduce time to market; and for early decision to retain those startups with the highest market /commercial potential.

The following key points shall guide the ILTTO in the technology development stage:

- 1) The ILTTO shall assist the potential development of technology by facilitating trainings for tenants on entrepreneurial skills and mind-set; team dynamics; business development support; product and customer development; financial and marketing basics, etc.
- 2) The ILTTO shall facilitate resources and facilities for prototype development and testing.
- 3) Once the innovation road map is framed using the business model canvas, startups should be encouraged to adopt the lean startup approach.
- 4) The ILTTO shall facilitate seed money/procurement to support the start-ups for prototyping and/or testing. However, requests for seed capital shall be made by the startup team in consultation with their coach/mentor and has to be submitted to the incubation management team. The request shall then be approved by the ILTT director after the evaluative recommendation by the technical advisory committee (TAC) (see appendix-9 for template on TT procurement request).
- 5) the ILTTO shall plan for coaching/mentorship of tenants of the TBIC using the following guidelines:
 - i. the tenants shall inform to the ILTTO in advance the specific coaching/mentorship types that they need, reasons, preference and availability in time and place, some details on current status and anticipated work plan (see appendix-10 for templates on tenant coaching/mentorship request form).
 - ii. the ILTTO shall plan for coaching/mentorship on a case-by-case basis depending on the needs of the tenants.

- iii. based on the different coaching types requested, such as team dynamics, entrepreneurial mindset, prototyping, marketing, finance, etc., the ILTTO shall contact and arrange for meetings with the coaches/mentors a few days ahead.
- iv. after the coaching/mentorship is completed, the coaches/mentors shall submit a brief report about their encounter with the tenants. The report shall be reflection of the types of coaching/mentorships, length/duration/frequency, impressions, and recommendations for ILTTO and the tenant, etc. (see appendix-11 for templates on tenant coaching/mentorship report form).

9.1.5. Commercialization / Dissemination

For a TT initiative emerging from the TBIC, the technology readiness and market entry strategy shall be used to check for potential of commercialization. A technology having a market potential could be licensed by ILTTO provided there exists a demonstrated need to acquire/utilize it from industry or community. In this case, an invention disclosure shall be made by the inventor to the ILTTO. Further details on invention disclosure are provided under appendix- 7 of this guideline.

The following key points will guide the ILTT directorate in the technology commercialization stage:

- 1) the ILTT director, in consultation with the TAC members, shall assess the commercial potential and market readiness of the technology innovation through its unique value proposition, competitive advantage, marketing strategy, team dynamics, availability of suitable partnership, any tractions made, potential for patenting, any requests and negotiation on IP licensing, etc.
- 2) if the inventor desires to directly apply for patent (without going to the TBIC), a preliminary disclosure has to be filled by the innovator to the ILTTO. The director, together with the IP expert, shall facilitate the administrative and financial requirements for the assessment, registration and protection of the invention.
- 3) for commercialization of IP, the procedures on patent licensing and subsequent revenue sharing schemes under section (10.3) and appendix-8 of this guideline shall be used.
- 4) if the commercialization involves the creation of a start-up company from the TBIC, the provisions on revenue sharing schemes under section (10.4) of this guideline shall be used.

9.1.6. Post-Incubation Services

Once startups graduate from the TBIC, proper follow up is expected from the ILTTO, with regards to their business development status. Pursuant to the terms and references of the tenancy agreement, the startup shall communicate to the ITTO about their challenges, achievements, and plans, technical/financial reports, and provide periodic updates on resource (time, human, financial) administration. For those startups already in the market and have started generating

revenue, the ILTTO shall check the execution of proper revenue sharing to AAU as agreed in the tenancy agreement. Any breach of such a commitment by any of the parties, shall be resolved based on dispute resolution scheme asserted in the tenancy agreement (see appendix-6 for such dispute resolution). If the startups seek post-incubation services from the TBIC, there shall be a new tenancy agreement, which shall clarify the duties and responsibilities of each party including fees to be charged according to the TT policy of AAU.

The TBIC may generate additional revenue through post-incubation services, which include offering technical and/or business support services, impact assessment, soft-skills development/training, market research, customer and product developments, expert advice, platform setting for networking and events, rental of offices and facilities.

In order to keep the functional and financial sustainability the of the TBIC, AAU shall increase the quality and quantity of startups with high growth potential. To achieve this, AAU shall open access to the TBIC not only to AAU community but also student startups from outside, whether established by AAU alumni or startups that graduated from AAU TBIC or SMEs having technical and/or business problems. Access shall also include to other potential customers including employees of industries or larger companies that want to translate their joint research with AAU into businesses, bringing new products/services to the market. The level of access and restriction shall be agreed on in advance though mutually beneficial tenancy agreement. (see Appendix-4 for checklist on post-incubation service).

10. Intellectual property right (IPR) management

The world intellectual property organization (WIPO), to which Ethiopia is a member, recognizes the following as major types of IP: Patents, Copyrights, Industrial Designs, Trademarks, and Geographic Indicators. Except the first, all the rest can be categorized as non-patentable. AAU recognizes a broader category of IP in its IP policy (2015): Patents, Utility Model, Industrial Design, Copy Right and Neighboring Rights, Trademarks, Trade Secrets, Plant Breeder's Right/ New Plant Variety and Tangible Research Property. Details of the different types of IP, ownership of IP along with the roles and responsibilities of ILTTO in managing IP protection and commercialization are provided in the policy under sections IV, V and VI respectively.

The following sub-sections provide implementation guidance for invention disclosure, protection and commercialization processes of IP.

10.1. Invention Disclosure, Patent Protection and Commercialization

10.1.1. Invention Disclosure

The first step in a process of IP protection and potential commercialization is the invention disclosure to be made by the innovator(s). This helps the ILTTO to keep record of relevant

information (date, innovator’s profile, content/nature of the claim, conflict of interest, etc.) and clarify whether the claim is patentable or not. In addition, the disclosure helps ILTTO to assess the commercial potential of the invention and identify potential licensee as early as possible.

Any invention with a potential of being patent protected and created by an individual or team, with or without co-inventors affiliated or not to AAU as a student or a staff, either going to the TBIC as tenant(s) or desiring for direct ways of IP protection without becoming tenant(s) of TBIC, shall formally disclose all inventions made by them to the ILTTO. The disclosure shall include relevant background information that is sufficiently clear and complete to be understood by an ordinary person in the art concerned⁵.

The following guidelines, which shall be communicated to the inventors in advance, shall assist the ILTTO as a general procedure for invention disclosure, assessment, protection, and subsequent negotiation for commercialization.

During the invention disclosure:

- 1) The ILTT IP expert shall give orientation to the inventor(s) about the IP process, such as the invention disclosure, patentability assessment, protection, and subsequent negotiation for commercialization, including the revenue distribution scheme based on the IP and TT policy of AAU. For further information, the IP expert shall refer to the director and/or to the ILTTO website, which shall be rich with such resources
- 2) the inventor shall then complete and return to the ILTTO the invention disclosure form (see appendix-7 in this guideline for the invention disclosure template)
- 3) the ILTT IP expert shall then register the invention claim and initiate further procedures outlined below

Once the disclosure agreement is received by the ILTTO, the IP expert shall do the following:

- 1) keep record of relevant information (date of receipt, inventor profile, contact details, and title of the claim, etc.)
- 2) verify information correctness/accuracy and completeness
- 3) keep the information with the highest confidentiality (see further in appendix-7 of this guideline, in sub-section “confidentiality” of the invention disclosure form)
- 4) communicate electronically or by phone or in person only with appropriate individuals (such as with all inventors and co-inventor (if any) mentioned on the invention disclosure, and the ILTTO director) about the title, date of receipt and name of inventor who submitted the disclosure form, with a mark of “Confidential Information”

⁵ *The Inventions, Minor Inventions and Industrial Designs, Proclamation, No. 123/ 1995*

- 5) communicate the ILTTO director about recommendations and to get approval to initiate formal assessment, including additional evaluator, if needed
- 6) once the ILTTO director approves the assessment, the ILTT IP expert shall conduct patent searches using initially the key words provided in the disclosure form and other appropriate mechanism that shall assist the assessment
- 7) the IP expert shall also assess any conflict of interest, in line with the IP policy of AAU and relevant proclamations and regulations of the country
- 8) based on the assessment for patentability and commercial potential of the invention, the IP expert shall forward preliminary recommendation whether AAU shall proceed to IP protection and subsequently commercialization through licensing to existing industry or cease any further action

After the patentability assessment of the invention:

- 1) the ILTTO and the inventor, shall discuss and reach an agreement on the result of the patentability assessment and any subsequent commercial potential
- 2) if there is no agreement, and in case of positive assessment result, the ILTTO shall explain alternative strategies to the inventor, such as joining the TBIC for further venture creation process as a startup
- 3) if the inventor and ILTTO reach an agreement to proceed with filing a patent application, the ILTTO shall then facilitate the associated administrative and financial requirements.
- 4) the ILTTO and the inventor may consult the national IP authority during the drafting and application for patent
- 5) Once the patent is filed by the ILTTO at the Ethiopian Intellectual Property Authority (EIPA), and the positive result is issued, the ILTTO and/or the inventor shall start the next step of general market search for potential licensing
- 6) The ILTTO and the inventor shall communicate/discuss each other periodically on any negotiations with interested parties, and reach an agreement on selecting the right licensee.
- 7) Once the agreement is reached, the ILTTO shall facilitate to execute the license agreement, between the University, inventor and the potential licensee. For this, the patent license agreement shall be used.

10.1.2. Patent Protection and Commercialization

It shall be the duty of the ILTT director to supervise the overall IP management, including the administrative and financial supports, according to AAU IP and TT policies and guidelines outlined in this manual.

The following key points shall be used to guide the protection and commercialization of processes of patentable IP:

- 4) The IP expert in ILTTO, in consultation with the director, shall facilitate the registration of IP for patent by providing the required technical assistance to the IP applicant.
- 5) Once the IP is granted, the IP expert in ILTTO, in consultation with the ILTT director, shall facilitate IP commercialization through license agreement between the different actors.
- 6) Any disagreement between different actors on IP ownership shall be governed by AAU IP Policy, 2015.
- 7) Once a licensee is found, the ILTTO, in consultation with the Legal Services Office of AAU, shall facilitate the license agreement process.
- 8) The rights and obligations of the inventor and the University shall be made part of the tenancy contract and patent license agreements, and shall be clarified by the ILTTO during the signing of such agreements.
- 9) According to the Higher Education and Training, Research Institutions and Industry Linkage (HETRIIL) regulation 2021, section 22/1 of Ethiopia, technology transfer agreements between a HEI's and the industry shall be registered by the Ministry of Trade and Industry. The ILTTO shall facilitate this registration process.

10.2. Distribution of incentives from patent commercialization

The allocation of net revenue generated from patent licensing shall be distributed fairly and transparently among the different actors that contributed to the patent and deserve their shares.

AAU's IP policy (2015), sections 8.11, describes the distribution of revenue generated from IP commercialization. According to this policy the gross revenue is “*the total amount of monetary proceeds obtained by the University from the commercialization of a particular IP including license fees, milestone payments, royalties, equity and others*”. On the other hand, out-of-pocket expenses, which includes all direct costs incurred by the ILTTO in the process of IP protection and exploitation such as costs of patent filing, marketing, licensing and others related to the commercialization of the IPR, has to be deducted from the gross revenue. The remaining net revenue shall be distributed to the different actors based on the following proportions:

- 1) 50 % to the inventor(s), (Inventor's share)
- 2) 30 % to the central University, (University's share)
- 3) 10 % to the appropriate College(s)/Institute(s)
- 4) 10 % to the Inventor's School(s)/Department(s)/Unit/Laboratory

Furthermore, the policy states that in the case of disagreement among inventors, school(s)/institute(s)/department(s), there shall be equal proportions to the distribution of their respective shares.

On the other hand, the recently (2021) released Higher Education and Training, Research Institutions and Industry Linkage (HETRIIL) regulation 2021 of Ethiopia, states a different royalty distribution scheme, which rather favors the inventor. According to section 18 of this regulation, innovators/inventors/creators/breeders, College/Department/laboratory, the ILTTO, and shall take

70%, 15%, 10% of the net revenue while the remaining 5% shall go to the Contribution for Income Fund to be established as per article 63 of Higher Education Proclamation.

A third alternative that captures the institutional and national policies is proposed as follows: Although AAU IP policy (2015) asserts that “the inventor’s share shall never be less than 30% of the net income”, in order to encourage innovators, there shall be a threshold (such as 5,000,000 ETB net revenue) to execute the AAU’s policy of 50-30-10-10 proportion. When the net revenue increases from 100,000 ETB to over 5,000,000 ETB, the inventor’s share decreases from 100 % to 50 %, while the shares of the other parties increase from 0 % to maximum of 30%.

The following table provides the proposed sharing proportions to the IP owner, the University and the college/institute/school that hosted the IP owner.

Table-1: Distribution of net income from IP commercialization (subject to taxation at the time of distribution)

Net Revenue (ETB)	Inventor’s share	University’s share	College/ Institute	School/Department /lab
Up to 100,000	100%	-	-	-
100,000 – 1,000,000	85%	10%	2.5%	2.5%
1,000,000– 5,000,000	75%	10%	5%	5%
Over 5,000,000	50%	30%	10%	10%

10.3. IP from tenants admitted in the TBIC

Any invention or patent created by tenants (as individual or team) after being admitted to the TBIC (which shall be effective from date of signing of a tenancy agreement) by using the services, resources, facilities, materials or equipment of the TBIC shall be subject to be governed according to the IP management scheme of AAU TT policy and specifically the IP ownership provision. In addition, the provision under section (10) of this manual shall be applicable for the invention disclosure, patent protection and commercialization aspects. The ILTTO shall make this clear to the tenant(s) during the signing of tenancy/contract agreement.

10.4. Distribution of incentives from startups of the TBIC

The startup company and the University shall enter into an agreement to share the benefits from future profit of sales of either the product/ service emerging from the company or the selling of some part or all of the company itself to a third party (such as to existing industry, investor or

venture capitalist). The existing TBIC establishment document asserts that after successful graduation from the TBIC, the startups shall “allocate about 5% of the share of their business” to AAU. This assertion has no justification (why 5%) and clarity (whether from gross or net, when and how, etc.), rather it is a direct replica of the Korean experience (as visited for benchmarking by the authors of the document).

In addition, the TBIC establishment document demands the startup to leave/exit the TBIC with a prototype. However, having not raised enough seed fund, startups would most likely struggle to barely survive in competitive market, shirking their resources during further product and customer development. It is therefore convenient (also found to be the desire of some of the current tenants) to keep AAU's share initially as minimum as possible. This also gives a grace time for the startups until they have enough traction/sales past the “Death Valley”, similar to the cost sharing scheme for students of AAU. Later, the startups shall start sharing maximum of **% from their net revenue after their breakeven point, which is when their revenue level exceeds their cost structure.

10.5. Other Incentives for TT Actors within AAU

In addition to financial incentives, AAU shall integrate a workload of appropriate level (e.g., a minimum of 3 Cr. Hrs. per semester) for academic staff, in recognition to and encouragement of participation in the innovation and incubation activities of AAU as innovators, coaches/mentors, and trainers. Academic staff having demonstrated participation or leadership/management or significant contribution to the TT affairs of AAU shall be given the privilege for promotion (e.g., minimum of 12.5% value shall be awarded for those investing a minimum of 10 % of their fulltime effort). This helps not only to motivate and increase participation in TT activities, but also complements the other core missions of AAU (research, teaching and community services).

SECTION FOUR: ORGANIZATION AND HIERARCHICAL RELATION

11. Organization Structural and Hierarchical Relation

The ILTTO shall have the following organizational and functional structure that enables it to effectively execute its core mission in relation to TT activities. An ILTT director, who is accountable to the VPRTT, and under the director there will be experts and an administrative assistant to support the TT and IP related activities along with the TBIC. The ILTTO under VPRTT shall have the authority to cascade TT related duties and responsibilities to respective associate deans of colleges/vise directors of institutes within AAU.

12. Duties and Responsibilities of Key Actors in the TT Process

This section provides the multiple duties and responsibilities of the technology donor (the University) and the technology recipients (industry and community) that participate in the TT process with their respective roles in the pre-incubation, technology development, incubation, technology transfer, and protection and utilization of patent rights.

12.1. Duties and responsibilities of key actors in the University

12.1.1. Major duties and responsibilities of ILTT director

- 1) The ILTT director, under VPRTT, will have the mandate to direct overall TT activities of AAU. The Director has to make sure that TT activities comply with the plans and the TT policies and procedures of AAU.
- 2) It is the duty and responsibility of the ILTT director to conduct a periodic assessment of its internal and external environment and stakeholders so that best practices shall be kept while challenges identified are addressed timely. Table A-3 in appendix 14 is provided as a tool/template to be used by the ILTT director for stakeholder analysis.
- 3) The ILTT director shouldn't encourage colleges/institutes, any unit in AAU, or individuals (staff members and students) that significantly utilize the resources (such as funds and facilities) of the University to engage in any form of informal TT activities and IP commercialization, that disregards the TT policy and possible IP ownership and revenue share of AAU thereby compromising quality that affects the reputation of AAU. If such cases become known to the ILTTO, it shall report to the legal and responsible offices in AAU, to take timely and corrective actions.

12.1.2. The specific duties of the ILTT director

The specific duties of the ILLT directorate include:

- 1) Initiating, planning, implementing, monitoring, and evaluating all TT initiatives at the University level
- 2) Providing periodic (quarterly, annually) reports about TT activities of AAU to VPRTT
- 3) Performing periodic benchmarking visits to other public and private incubators to learn from their business experiences
- 4) Communicating with AAU-colleges/institutes to allow usage of workshops/facilities for startups to develop prototypes and jointly framing schemes for mutual benefits
- 5) Organizing promotional event(s) for staff, students, and external partners to increase the visibility of the TBIC and increase the awareness of AAU community
- 6) Reaching out for successful entrepreneurs, alumni and volunteers as sources of finance and suppliers of knowledge, experience, and market-link for startups
- 7) Facilitating the process of effective IP commercialization through patent registration, protection, and licensing
- 8) Assisting IPR/patent owners in signing non-disclosure and license agreements
- 9) Facilitating the fair distribution of revenue generated from TT activities to the key actors (the University, and the IPR owner) that contributed to the TT
- 10) Providing the necessary administrative support for tenants of TBIC in the pre-incubation, incubation and post-incubation phases
- 11) Following-up the business development services provided to the startups in the TBIC
- 12) Supervising the proper and timely execution of contractual agreements related to TT activities
- 13) Managing any disagreement between different actors on IP ownership and subsequent revenue distribution in accordance to the AAU IP and TT Policy
- 14) Providing administrative and technical assistance to colleges/institutes in establishing their own innovation and incubation centers when the request arises
- 15) Communicating timely with the associate deans/directors to execute their duties and responsibilities as outlined below
- 16) Monitoring and evaluating ethical compliance of startups' prototype development and testing leading to innovation and take measures against non-compliance in accordance to AAU ethics policy

12.1.3. Duties and responsibilities of associate deans/vise-directors

The associate deans/vise directors for research and technology transfer (RTT) shall coordinate TT activities from the academic departments/ units of their respective colleges/institutes.

The duties and responsibilities of the associate deans/vise directors for RTT include:

- 1) Produce periodic reports (quarterly and annually) on TT activities to the ILTT director

- 2) Provide relevant support for departments/units to increase their participation in TT activities
- 3) Organize pre-incubation activities for students starting from the freshman week, such as entrepreneurship awareness/motivational trainings
- 4) Collaborate with the ILTTO in the TT promotion mechanisms for staff at college/institute level
- 5) Facilitate college/institute level resources/facilities for the ILTTO in its TT activities, particularly during proposal evaluation/selection, prototyping, and the commercialization/dissemination stages
- 6) Manage any disputes arising from the TT process in collaboration with the ILTT director, and in accordance to the AAU IP Policy, 2015
- 7) Mobilize the staff and resources in their respective colleges/institutes for TT activities in the area of their specialization or by teaming up with other units
- 8) Periodically assess research outputs for TT potential and to be commercially viable innovations for the benefit of the researchers, the University and the community/industry
- 9) In collaboration with the ILTTO, devise and implement stakeholder engagement strategies to effectuate TT activities at their respective college/institute

12.1.4. Duties and responsibilities of ILTTO IP Expert

The IP expert is accountable to the ILTT director. The expert needs to have excellent interpersonal and networking skills, including the ability to communicate effectively at senior levels, be aware of the international, multicultural environment, mobilize resources and other team members in ILTTO to facilitate the effective and sustainable transfer of technology to end users.

The main duties and responsibilities of the IP expert include:

- 1) Assist the ILTT director in the overall IP management, including the administrative and financial supports required for patent filing
- 2) Facilitate the invention disclosure claims of the innovators
- 3) Communicate with the TBIC expert on issues related to IP coming from TBIC tenants
- 4) Facilitate the registration of IP for patent by providing the required technical assistance to the IP applicant
- 5) Conduct business link with the industry and community to seek potential commercialization potential of IP through licensing
- 6) Manage the IP commercialization process through license agreement between the different actors, according to AAU IP policy, 2015, AAU TT policy, and the procedures outlined in this manual

- 7) Keep confidential (when appropriate) and good record of financial and technical documents related to IP protection and commercialization processes
- 8) Perform additional duties as offered by the ILTT director

12.1.5. Duties and responsibilities of TBIC Expert

The TBIC expert is accountable to the ILTT director. The expert needs to have excellent interpersonal and networking skills, including the ability to communicate effectively at senior levels, be aware of the international, multicultural environment, mobilize resources and other team members in ILTTO to facilitate the effective and sustainable functions and services of the TBIC.

The main duties and responsibilities of the TBIC expert include:

- 1) Perform periodic planning for selection and admission of tenants
- 2) Organize periodic promotion events (see appendix-1 for checklists on planning pre-incubation activities)
- 3) Advertise calls for startup innovation competitions, and communicate the ILTT director and the TAC members for screening, and announce the subsequent consolidated results to candidates
- 4) Assist the startups on the terms and references of the tenancy agreement to be signed between them and the TBIC
- 5) Remind the startups to periodically observe and comply with the tenancy agreement, and assist them (when appropriate) in preparation of periodic reports
- 6) Manage the appropriate service, facility, and resource allocation to the startups, in consultation with the ILTT director and the TAC members
- 7) Conduct the invitation, briefing and assigning of coaches/mentors and trainers, in consultation with the director
- 8) Assist the signing of contracts with trainers/coaches/mentors and the implementation of appropriate incentives
- 9) Organize trainings to startups on business development services
- 10) Communicate with the IP expert on issues related to IP coming from tenants
- 11) Report periodically to the ILTT director on the progress of startups and meetings held with the coaches/mentors
- 12) Manage the procurement request of tenants together with the director and TAC members
- 13) Conduct business link with stakeholders and professionals (investors, lawyers, accountants and financial advisers)
- 14) Supervise the office and facility usage by tenants
- 15) Keep confidential (when appropriate) and good record of TBIC's financial and technical documents

- 16) Take minutes of meetings during selection of tenants, procurement decision, etc. with the director and TAC members
- 17) Assist the director in the transfer of technology to end users (community/industry)
- 18) Manage exit of tenants from the TBIC
- 19) Report quarterly, half yearly and annual reports about the activities of the TBIC, to the ILTT director
- 20) Perform additional duties as offered by the ILTT director

12.1.6. Membership, Duties and Responsibilities of TAC members

The following key points shall guide the ILTT director for the decision on the selection and number of the TAC members. The ILTT director, in consultation with VPRTT, shall incorporate experts from the following areas:

- 1) staff from different academic disciplines within AAU having good track records and with participation/experience in:
 - a. innovative technology development through research, TT project, or startup
 - b. startup coaching/mentoring within or outside AAU
 - c. innovation project management (planning, executing, monitoring and evaluation)
 - d. giving trainings in entrepreneurial mindset and skill development,
 - e. giving trainings in business development services
 - f. consultancy to industry
- 2) from business community being successful entrepreneur, preferably from AAU alumni
- 3) from industry, experts on research and innovation
- 4) from ministries of education and innovation (MoE, MInT), experts on TT

The TAC members shall have the following roles and responsibilities:

- 1) The TAC shall be accountable to the ILTT director
- 2) Act in accordance with the provisions of this guideline specifying the roles and responsibilities of TAC, during the TT proposal evaluation/selection, the decision of procurement fund allocation for prototyping, and the commercialization/dissemination stages
- 3) Advise the ILTTO with procurement requests assessment and approval for prototype development
- 4) Carry out inspections on technical and financial records, documents, registers and accounts of the tenants, only in consultation with and for the purpose of supporting the formal activities of the ILTTO

- 5) Advise the ILTTO to take measures against non-compliance of tenants to the tenancy agreement, including the termination of contract and return of physical and financial resources that AAU has invested in the prototype development
- 6) Review the request for extension of stay in the TBIC by the tenants and recommends for approval by the ILTTO
- 7) Assist the ILTTO in the assessment of the overall market readiness of the startups and the decision on their exit strategy
- 8) Assist startups in the TBIC to establish linkage/network with market and business community
- 9) Recommend/facilitate for startups to get access to facilities and resources (technical and financial) in research and industry setups
- 10) Preserve the confidentiality of any information accessed from the ILTTO that is related to the startups' business idea

12.1.7. Duties and responsibilities of TBIC tenants

A detailed description of the duties and responsibilities of tenants, who shall be admitted into the TBIC, shall be incorporated in the tenancy agreement to be signed between the tenants and the TBIC.

The following guidelines shall assist the ILTTO in defining and communicating the roles and responsibilities of tenants to be admitted to the TBIC:

- 1) Select a representative to sign the tenancy agreement and comply with its terms and references.
- 2) Make timely request for procurement with reasonable and justifiable claims
- 3) Utilize efficiently and ethically the facility, services and resource allocation to them in the development prototype leading to innovation
- 4) Avail themselves during the meetings with coaches/mentors/trainers organized on business development services
- 5) Communicate with the IP and/or TBIC expert on issues related to IP during their stay in the TBIC
- 6) Request assistance (when appropriate) of TBIC expert in the preparation of periodic reports
- 7) Report periodically to the TBIC expert and copy to the ILTT director on their progress and meetings held with the coaches/mentors
- 8) Participate in business link with stakeholders and professionals (investors, lawyers, accountants and financial advisers)
- 9) Keep confidential and good record of their financial and technical documents

- 10) Take minutes of internal meetings during major decisions and changes such as request for procurement, coaching/mentorship request, IP disclosure, any negotiation with third party for funding or sales, decision to quite or extend the stay in the TBIC, etc.
- 11) Allow the ILTTO and the TAC members to carry out inspections on technical and financial records, documents, registers and accounts, only for the purpose of supporting the formal activities of the TBIC and in compliance with the terms of the tenancy agreement
- 12) Inform the TBIC expert and the director when the exit from the TBIC approaches, and comply to the terms and conditions of the tenancy agreement
- 13) Present quarterly, mid-term and final reports about their activities, challenges and plans to the TBIC expert, the ILTT director, and the TAC members
- 14) Present activities/prototypes at the TBIC or workstations, or research week to visitors including for researchers and media outlets
- 15) Perform additional activities as offered by the ILTTO

12.2. Duties and responsibilities of TBIC coaches/mentors/trainers

- 1) Provide professional coaching/mentoring/training for tenants based on their specific request as approved by the ILTTO
- 2) Produce brief report on the coaching/mentorship activities performed (see appendix-11 for reporting template)
- 3) Assist the startups in their preparation of business plan, business model, and their communications
- 4) Guide the startups in their journey of product and customer development
- 5) Assist startups on team dynamics, communication skills, business development skills, technical capabilities, and resource (time, information, finance and human) management skills
- 6) Consult the TBIC team on the appropriate skill-set and training to be provided to the startups
- 7) Assist the startups in their preparation of periodic reports
- 8) Guide the startups in their request for seed fund/ procurement request for prototyping
- 9) Guide the startups in market assessment, product launch, and negotiation of IP commercialization
- 10) Guide tenants to behave ethically and responsibly in their startup journey and development of prototype leading to innovation and advice the ILTTO to take measures against non-compliance

12.3. Duties and responsibilities of technology recipients (Industry and Community)

12.3.1. Duties and responsibilities of the industry

As a technology recipient, the industry shall have the following duties and responsibilities to facilitate an effective TT process for mutual benefit:

- 1) The industry is responsible to formal representative/delegate to sign an agreement with the University
- 2) Identify, prioritize and communicate to the University through the ILTT director any innovation and technology transfer agenda that requires joint effort and result in mutual benefit
- 3) The industry shall abide to the agreement when granted with the license to use the IPR for commercial purpose with the different actors
- 4) In case the industry requires further research and development of the product at the University, the industry shall provide further funding
- 5) The industry, based on an agreement signed with the University, has the responsibility of developing and commercializing the technology and sharing the profits with the University and hence to the IP owner

12.3.2. Duties and responsibilities the community

- 1) The community shall collaborate with the University in specifying real societal challenges that require the intervention of the University through TT process
- 2) The community through a formal representative/delegation (such as school director, leader/manager of governmental or non-governmental organization, etc.) is responsible to sign an agreement with the University in order to maximize the intended use and impact of the technology
- 3) Make formal and timely acknowledgement of the University's effort through proper channels/platforms
- 4) After successful transfer, the community should take shared responsibility with the University to avoid unethical and unlawful practice/usage and timely notify such attempts to legal entities and the University
- 5) The community shall assign individuals to take trainings and make timely updates and bring to the attention of the University any technical challenges prohibiting the intended functionality of the technology transferred

SECTION FIVE: MISCELLANEOUS PROVISIONS

13. Reporting system

In accordance with the duties and responsibilities given under section (12.1.3) of this implementation guideline, each RTT vice dean/director in AAU shall report to the ILTT director. The ILTT director shall report to the VPRTT and the latter to the president on matters related to the overall TT activities of AAU.

14. Formats and directions

In order to facilitate an effective TT process, the appendices under section six (6) provides key points that shall be used as formats and guidance, with further specifications to be amended when the ILTTO deems it appropriate.

15. Enforcement

The parties responsible for the enforcement of this TT implantation guide are the office of vice president for Research and Technology Transfer (VPRTT) and the ILTTO.

The enforcement procedure shall be such that the office of vice president for research and technology transfer (VPRTT) oversees the overall TT functions being managed by the ILTT director in accordance with the duties and responsibilities presented under section (12.1.2) of this implementation guideline. The ILTTO makes sure that any TT activity in the University goes in line with the regulations and provisions outlined in this implementation guideline.

The ILTTO shall take procedural measures/actions following any violations by any college/institute/school/ unit/department disobeying and not abiding to the legal and binding provisions outlined in this guideline. In addition, the ILTTO has to make sure that the key actors in the TT process (IP owner/innovator/startup from AAU and industry/community from outside) shall comply with their duties and responsibility assigned in the implementation guide.

The ILTTO shall be assisted by the associate deans/directors of research and technology transfer, who are responsible for coordinating TT activities from their respective college/institute.

16. Implementation

The implementation guideline shall come to effect as of **---, 2022**, following the approval by the Senate of AAU. The owner of this implementation manual, ILTTO, shall be responsible for publicizing this document on its official website and the website of the University. Printed copies shall be distributed to VPRTT and vice deans/directors of the respective colleges and institutes.

17. Version Control

Document and Version Control	
Short Name:	“AAU Technology Transfer Implementation Manual- Ver. 01/2022”
Version:	Ver. 01/2022
Effective Date:	--, --, 2022
Owner:	Office of Industry-Linkage and Technology Transfer (ILTT), under the Vice President for Research and Technology Transfer (VPRTT)
Applicability:	All units (colleges/institutes/schools) under AAU
Target Groups:	AAU employees (academic and administrative staff) and students (formally registered) as approved by AAU Senate legislation
End-users/ Customers:	Community and Industry outside AAU
Human Resource ILTTO:	Director: ILTT
	Senior Expert: Consultancy and Outreach Services
	Senior Expert: Adaptive Research and Incubation
	Senior Expert: TT, IP, and Science and Technology Park (STP)
	Administrative Assistant: TBIC
Contact Address:	AAU Main Campus, New Building (President Office Bldg.) 4th floor, Room- 409-11
	P.O. Box: 1176 Addis Ababa, Ethiopia
	Phone Office: +251-111544031/ +251-111544020
	Email: uil.tt@aau.edu.et
	Website: https://iltt.aau.edu.et/

SECTION SIX: APPENDICES (FORMATS AND TEMPLATES)

Appendix 1: Planning for TT Initiation/Pre-Incubation Activities

AAU-VPRTT-ILTTO																	
Form No.: TBIC00**																	
Checklist for Innovation Call⁶																	
1) Short Title:	“...Innovation Call...”																
2) Brief Description about ILTTO/TBIC and the call	Not more than half page																
3) Call date:	dd, mm, yyyy																
4) Deadline for Submission:	dd, mm, yyyy																
5) Caller:	AAU, Vice President for Research and Technology Transfer (VPRTT), Office of Industry-Linkage and Technology Transfer (ILTT)																
6) Applicability:	All units (colleges/institutes/schools) under AAU																
7) Target Groups/Eligibility:	AAU employees/staff or students or alumni, or female only if applicable																
8) Application and Selection Procedures	See appendices 2 and 3 for selection procedure																
9) Components of the Application Form: <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">a) Details of the applicant(s)</td> <td style="width: 50%;">i) Outcome/impact of the project</td> </tr> <tr> <td>b) Motivation for the competition</td> <td>j) Financial feasibility</td> </tr> <tr> <td>c) About the business idea/start-up project</td> <td>k) Market and Consumers</td> </tr> <tr> <td>d) Title of the technology business idea/start-up</td> <td>l) Financial source of the project</td> </tr> <tr> <td>e) Stage of project</td> <td>m) Willingness to grant AAU its share and profit</td> </tr> <tr> <td>f) Business Model</td> <td>n) Environmental and health hazards</td> </tr> <tr> <td>g) Idea/Project Overview</td> <td>o) Service or material support expected/required</td> </tr> <tr> <td>h) Product/Service Description</td> <td></td> </tr> </table>		a) Details of the applicant(s)	i) Outcome/impact of the project	b) Motivation for the competition	j) Financial feasibility	c) About the business idea/start-up project	k) Market and Consumers	d) Title of the technology business idea/start-up	l) Financial source of the project	e) Stage of project	m) Willingness to grant AAU its share and profit	f) Business Model	n) Environmental and health hazards	g) Idea/Project Overview	o) Service or material support expected/required	h) Product/Service Description	
a) Details of the applicant(s)	i) Outcome/impact of the project																
b) Motivation for the competition	j) Financial feasibility																
c) About the business idea/start-up project	k) Market and Consumers																
d) Title of the technology business idea/start-up	l) Financial source of the project																
e) Stage of project	m) Willingness to grant AAU its share and profit																
f) Business Model	n) Environmental and health hazards																
g) Idea/Project Overview	o) Service or material support expected/required																
h) Product/Service Description																	
10) Application Submission To: <p style="text-align: center;">AAU-ILTTO TBIC Administrative Assistant Further Info.: AAU-ILTTO Director Contact Address: AAU Main Campus, New Building (President Office Bldg.) 4th floor, Room- 409-11 P.O. Box: 1176 Addis Ababa, Ethiopia Phone Office: +251-111544031/ +251-111544020 Email: uil.tt@aau.edu.et Website: https://iltt.aau.edu.et/</p>																	

⁶ Adapted from AAU ILTTO TBIC: “Call for Female-only Innovation Competition, 2022”

Appendix 2: TT Project Proposal/Startup Pre-Screening

A two-stage selection shall be used in order to retain the best candidates. The preliminary phase shall be used to filter out, those startups having business ideas only at its preliminary stage, with weak technical feasibility, unrealistic/too ambitious goal, having not formed teams, lacking creativity/novelty, and unlikely to create a sustainable socio-economic impact.

AAU-VPRTT-ILTTO			
Form No.: TT00**			
Date(dd/mm/yyyy): ____/____/____	TT Project Proposal/Startup Pre-Screening Criteria⁷		Page ____ of ____
S. N.	Pre-Screening/Evaluation Criteria	Weight (%)	Rate (1-5)
1.	The project is new/innovative	10	
2.	The project can solve pressing problem or address current needs of the community/industry	15	
3.	The project has a high potential to create a sustainable socio-economic impact (such as high job creation, foreign currency generation, import substitution, etc.)	15	
4.	The project is in line with the AAU's priority thematic/focus areas	7	
5.	The project is feasible in terms of its technical aspects (including sustainable availability of local resources/raw material)	10	
6.	The project is feasible in terms of its financial aspects	10	
7.	The project has high growth/scalability potential	10	
8.	The project has been supported by collaborative or independent research	10	
9.	Team members have relevant professional skills/experience for the proposed technology	8	
10.	The content, clarity, and format of the proposal documents are high and meet the submission conformity standards of ILTTO	5	
Remark:			
*5=Very strong, 4= Strong, 3= Moderate, 2= Weak, 1= Very weak N.B. if the total score is more than 70% , the proposal will be considered for the next step			

⁷ Adapted from: "A Technology Transfer Procedure/Workflow for Ethiopian Universities, prepared by Sustainable Training and Education Program (STEP), The German Organization for Cooperation, GiZ, in collaboration with MoE, draft, (2017)"

Appendix-3: TT Project Proposal/Startup–Main Selection Format

Those going to the second screening phase shall have developed business plan with strong technical and business case demonstrated, with strong team, research output, prototype, traction, strong technical background, valid revenue model, strong customer demand, industrial support/desire, and having a potential to create a sustainable socio-economic impact. In addition, they should have the highest growth/scalability potential, be in line with institutional/national strategic focus/priority areas (such as high job creation, foreign currency generation, import substitution, local availability of raw material, etc.).

AAU-VPRTT-ILTTO				
Form No.: TT00**				
TT Project Proposal/Startup Main Evaluation Criteria ⁸				
Date(dd/mm/yyyy): ____/____/____		TT Project Proposal/ Startup Main Evaluation Criteria	Page ____ of ____	
S. N.	Major Criteria (Weight)	Sub-Criteria	Weight (%)	Points (1-5)
1	Relevance/ Appropriateness (Technology is appropriate, practicable, desirable, affordable, and impactful) (20%)	The technology is new/novel	5	
		The technology is improved/adapted	5	
		The technology is coherent with institutional, or national thematic/priority areas	5	
		The proposed technology can solve a problem of the community/industry	5	
2	Development Stage/Readiness (20%)	Idea level	3	
		Prototype developed and tested	4	
		Patent filled/protected	5	
		Pilot sales/traction achieved	8	
3	Customer Development (8%)	Target customers/users are discovered	3	
		Customers are willing to adopt/pay for the innovation	5	
4	Team dynamics (10%)	Team members have appropriate professional job/role division and gender balance	3	
		Team members have entrepreneurial motivation /readiness	3	

⁸ Adapted from: “A Technology Transfer Procedure/Workflow for Ethiopian Universities, prepared by Sustainable Training and Education Program (STEP), The German Organization for Cooperation, GiZ, in collaboration with MoE, draft, (2017)” and AAU ILTTO TBIC, “Call for Female-only Innovation Competition”.

		Academic qualification and experience of team members (*good composition (4%); all senior (3%); all junior (<3%))	4	
5	Appropriateness of methodology to be used (12%)	Clarity of the methods and tools for technology development	3%	
		Availability local and sustainable raw materials	5%	
		Easiness of the technology design and development	4%	
6	Commercial value of the technology (20%)	Availability of adequate local demand	5%	
		Easiness of manufacturability	5%	
		Easiness of business establishment (start-up, IP licensing, etc.)	7%	
		Easiness of marketability	3%	
7	Appropriateness and balance of project activities and budget requirement (10%)	Appropriateness of project activities with the scope and theme	2.5%	
		Appropriateness of budget requirements with project activities	2.5%	
		Attainability of requested budget	2.5%	
		Attainability of project outcomes in the stated time duration	2.5%	
		Total		
Remark:				
Proposal scoring only ≥ 60 shall be considered for the next stage				

Appendix-4: Selection of TBIC Customers for Post-Incubation Service

For due diligence checklist, the criteria under Appendix-3: TT Project Proposal/Startup–Main Selection Format, shall be used by the ILTTO. In addition, the following specific points shall be used to decide on the acceptance of external customers seeking post-incubation services at the AAU-TBIC. The ILTTO, in consultation with the TAC members shall review the level of technology readiness and market potential of the startups.

AAU-VPRTT-ILTTO	
Form No.: TT00**	
Checklist for Selection of TBIC Customers for Post-Incubation Service⁹	
The following points shall be used as a checklist for the ILTTO to decide on the acceptance of external customers for post-incubation services at the AAU-TBIC:	
<ul style="list-style-type: none">a) alignment of the demand of startups with main expertise of AAUb) the TBIC shall be able to give an added value to the customer. The added value may include one or more of the following:<ul style="list-style-type: none">⇒ technical advice by coaches⇒ usage of technical tools that are available in AAU but not at the customer⇒ training in technical topics and business topics⇒ usage of the TBIC facilities and⇒ networking with the other incubated entrepreneursc) the TBIC shall have the capacity to support the customerd) the TBIC shall gain economic benefits from the services it's going to providee) ILTTO shall select the customers with highest growth potential and socio-economic advantagef) a critical discussion and negotiation (or an interview) shall take place with the potential customer in which the ILTTO manager, together the mentors/coaches or specialists assess the win-win potential of the situationg) if the request of the startups is approved, a standard incubation tenancy contract agreement shall be filled outh) if not the request for post-incubation shall be declined	

⁹ Adapted from: “Mekelle University TBIC Guideline, 2019 (draft)”

Appendix-5: Selection of Ad-hock TBIC customers

The same selection/screening criteria for regular applicants described under appendices 2 and 3 shall also apply for ad-hock applicants, except the additional condition that the latter shall convince the ILTTO and the TAC members with strongly demonstrated urgency level, technology readiness and market potential of the innovation. The ILTTO has to negotiate with the ad-hock applicants and organize a special case for the access to the different services and facilities of the TBIC.

Appendix-6: Startup/Tenant -TBIC Contract Agreement

The ILTTO shall use the following key points as due diligence checklist while preparing a tenancy contract agreement for startups joining the TBIC. It shall contain the standard requirements for management, reporting, meetings and deliverables for contracts to be made between the tenants and the TBIC.

AAU-VPRTT-ILTTO
Form No.: TBIC00**
Template for Startup/Tenant -TBIC Contract Agreement¹⁰
<p>1) General Under this section, the tenancy contract agreement here after referred to as “the agreement” shall provide background information about the TBCI services and details on the rights and obligations of the tenants and the technology incubation center (TBIC) AAU.</p> <p>2) Purpose The purpose of the agreement is for tenant management, progress reporting, elucidating challenges and setting milestones for deliverables, setting mechanisms for service and resource request (including procurement request), setting tenancy period, setting exit criteria, specifying duties and responsibilities of each party, setting IP related issues, asserting revenue sharing modalities, issues on dispute resolution, language and witness.</p> <p>3) Representatives The startup shall have a representative tenant, who shall be responsible to sign the agreement and communicate with the TBIC. For the same purpose, the TBIC shall be represented by the ILTT director or a formal delegate from the ILTTO team.</p> <p>4) Reports and Deliverables</p> <p>a) Whom to report? The progress reports, in four duplicates, both in an electronic or printed version addressed to the ILTTO, or handed over to the TBIC expert. The expert, after checking formalities and correctness, shall report to the ILTT director. A copy of the report shall also be sent to the TAC members and the coach/mentor of the tenants, if appropriate and recommended by the director.</p> <p>b) When to report? During the stay in the TBIC, the tenants shall prepare a printed and electronic copy reports quarterly, in addition to mid-term, annual and final exit reports. The tenants shall submit their reports two (2) weeks in advance of submission schedule.</p> <p>c) What to report during the stay in the TBIC? The following core points shall be included in the intermediate reports:</p>

¹⁰ Adapted from: AAU ILTTO TBIC, “Technology Business Incubation Service Agreement”, and “Open Call Guidelines, European Space Agency’s Business Incubation Centre, Redu, Belgium”

- i. cover letter with: dates, subject, name/title of the startup project, name and contact details of the formal representative/delegate of the startup, main body, and signature of the reporter (s).
- ii. activities accomplished during the reporting period
- iii. over all description of progress with respect to developments of: business model, business plan, prototype, customer, market link, fund raising, etc.
- iv. meetings with coaches/mentors, trainings received
- v. request made or to be made for procurement, services, etc.
- vi. any business link created or anticipated with stakeholders and professionals (investors, lawyers, accountants and financial advisers)
- vii. minutes of internal meetings during major decisions and changes such as: IP disclosure, any negotiation with third party for funding or sales, decision to quite or extend the stay in the TBIC, etc.
- viii. technical and financial records, invoice, documents related to sales made, donations/funds received, loans taken, etc.
- ix. any presentations or demonstrations done within or outside the TBIC, or at AAU research week to the TAC members, visitors, researchers, investors, media outlets, etc.
- x. if any challenges encountered and any measures taken or planned to be taken
- xi. activities planned for the next period
- xii. any further relevant information (if available)

d) Annual Performance Report

The annual performance report shall describe all of the conditions under Article 4 (c) of this contract agreement during the previous twelve (12) months. The tenants shall submit this report to the ILTTO (according to Article 4 (a) of this contract agreement), two (2) weeks in advance of the annual submission date.

e) Mid-Term Report

The mid-term report shall describe all of the conditions under Article 4 (c) of this contract agreement half way during the length of stay assigned according to Article 9 of this contract agreement. The tenants shall submit this report to the ILTTO (according to Article 4 (a) of this contract agreement), two (2) weeks in advance of the mid-term submission date.

f) Final Exit Report

The final exit report shall describe all of the conditions under Article 4 (c) of this contract agreement during their entire length of stay assigned according to Article 9 of this contract agreement. The tenants shall submit this report to the ILTTO (according to Article 4 (a) of this contract agreement), two (2) weeks in advance of the termination date of the contract term.

This report shall be as complete and formal as possible, with all the activities undertaken by the tenants and services provided to them by the ILTTO during the contract term. The final exit report shall not be mere reference to any other previously made intermediate reports, rather tenants shall provide more details and updated information on (on top of the conditions under Article 4 (c)):

- i. executive summary: appropriate for non-experts; maximum of 2 pages and appropriate for publication but without confidential information/data;
- ii. latest forms of the business model and the business plan (see Article 4 (g) & (h) in this contract agreement)
- iii. description of progress with respect to prototype developments
- iv. key milestones on customer acquisition contacts established, market link, fund raising, sales, etc.
- v. key lessons learned, and recommendations for ILTTO to make amendments
- vi. details of the financial and technical supports received from ILTTO and any other support partners
- vii. any IP disclosure applications, patent filings, license agreements negotiations made during the contract term between the tenants and any party
- viii. any leaflets/brochures/publications produced, if appropriate
- ix. illustrations or photographic documentations: photographs and/or videos of events/trainings/coaching/mentorship/demonstrations/presentations etc., as organized by the TBIC/ILTTO or where tenants participated; photographs of prototype and customer development with major progress and tests made
- x. for further software and hardware deliverables, refer to Article 4 (i) in this contract agreement
- xi. any support/relevant information (if available)

g) Latest/Updated Business Model

Startups shall frame their innovations using the business model canvas with nine blocks: key value proposition, customer segments, customer relationships, key channels, key resources, key activities, key partners, and cost structure and revenue structure.

Table A-1: business model canvas¹¹

Key Partners	Key activities	Value proposition	Customer relationships	Customer Segments
	Key resources		Channels	
Cost structure			Revenue structure	

h) Latest/Updated Business Plan

The tenants shall develop a full-fledged business plan that outlines the framework with actions for the development of the startup company. The business plan shall capture

¹¹ <https://www.strategyzer.com/canvas>

details of not only technical and financial activities, but also analysis of risks/uncertainties and the corresponding mitigation strategy.

The Business Plan shall also describe the unique value proposition of the proposed product/service, the technical requirements, the feasibility analysis, the market analysis, the target customers/industry, the management team, the marketing strategies, and financial requirements.

Due diligence checklist for major components of the business plan:

- i. Cover Page (business name, profile and contact details)
- i. An executive summary (clear and concise summary of major and most important components of the business plan)
- ii. Mission Statement (the long-term goals/purpose with action words)
- iii. Product/service description (details of the unique value proposition)
- iv. Analysis of Internal (Strength, Weakness) and External (Opportunities, Threats), SWOT, factors
- v. Marketing Plan (analysis of market opportunity, market share and target customers, etc.)
- vi. Competition (competitors and competitive advantage)
- vii. Financial Plans (capital, projected sales, pricing plan, cash flow, 5 years growth plan)
- viii. Production and distribution plans (methods, costs, capacities and implementation schedule)
- ix. Management Plan (management team, key milestones)
- x. Appendices (CVs, support letters, awards, IP/patents, research supports, etc.)

i) Deliverables

As part of the final exit report to be made by the tenants the following deliverables shall be handed over to the ILTTO at least four (4) weeks before the termination of the contract agreement. The ILTTO shall check appropriateness of the deliverables in consultation with the TAC members.

- i. **Software (including computer programs):**
If the startup company has been engaged in software development as its core business idea proposition, then a copy of the software developed shall be delivered to the ILTTO, which shall be kept confidential according to the terms under Article 5 in this contract agreement. However, the startups shall provide a demonstration of the software or an equivalent prototype to the TBIC expert or ILTTO director including, with a preview/movie clip illustrating its usage and application that is suitable for the purpose of exhibitions or presentations to AAU community or external partners/stakeholders.
- ii. **Hardware (prototype):**

If the startup company has been engaged in hardware/ machine development as its core business idea proposition, then a copy of the product or prototype developed shall be delivered to the ILTTO, which shall be kept confidential according to the terms under Article 5 in this contract agreement. However, the startups shall provide a demonstration of the product or an equivalent prototype to the TBIC expert or ILTTO director including, with a preview/movie clip illustrating its usage and application that is suitable for the purpose of exhibitions or presentations to AAU community or external partners/stakeholders. If the costs of manufacturing the product/prototype is very high, the startups shall keep the original product/prototype and deliver a minimum viable product (MVP) or digital soft copy of the prototype design.

iii. **Miscellaneous**

After the termination of the contract agreement upon successful graduation from the TBIC, startups shall be willing/collaborative to lend or make available their software and/or hardware products/prototypes to ILTTO for the purpose of exhibitions or presentations to AAU community or external partners/stakeholders.

5) Confidentiality

Unless otherwise agreed to in prior written consent, the Parties agree to keep strictly confidential and shall not disclose any documentation or data or information or materials or any audio-visual reports or outputs related to the core activities of either party, whether marked or un-marked (as “Confidential Information”), to any third Party whatsoever, unless the disclosure of such information by either Party is required under law or the order of any court of law, in which case such Party shall first inform the other Party before disclosing any of the other Party’s information. In respect of certain information that either Party may reveal to the other Party, the other Party hereby agrees to keep such information confidential, and the donor Party may require the recipient to sign a non-disclosure agreement.

6) IP Related Issues

Any invention or patent created by tenants (as individual or team) after being admitted to the TBIC (which shall be effective from date of signaling this agreement) by using the services, resources, facilities, materials or equipment of the TBIC shall be subject to be governed according to the IP management scheme of AAU TT policy and specifically the IP ownership assertion.

7) Revenue Sharing

After successful graduation from the TBIC, the startup shall be willing to grant AAU its share from net profit in accordance to the revenue sharing scheme specified in AAU TT policy.

8) Governing Law and Dispute Resolution

The contract agreement shall be governed by the laws of the Federal Democratic Republic of Ethiopia. Any dispute arising out of or relating to the contract agreements amongst the different parties or failure to abide by or the breach thereof by any of the parties or which the parties are unable to resolve on their own, shall be governed according to the laws of the Federal Republic of Ethiopia.

9) Term and Termination

The contract agreement shall specify the incubation period (length of stay) in years for the tenancy. Such terms may include a probation period (for instance one year out of the three years of stay) to decide for the ILTTO whether the startups leave or continue staying based on satisfactory progress. The agreement shall also specify the conditions upon which the contract terminates, such as:

- a) graduation from the TBIC; or if the parties violate any of the terms and conditions of the agreement; or if the startups commit any fraud, theft or any other offence punishable under law; or unsatisfactory performance of the startups as per the recommendation of the TAC; or
- b) up on termination, due to the conditions stated under sub-section (a) above, the TBIC shall have the right to deny access to the TBIC, after giving a (x) working days' notice; or
- c) up on termination, due to conditions stated under sub-section (a) above other than successful graduation from the TBIC, the startup shall return to the ILTTO or pay (x%) compensation in cash or kind for the seed fund (if applicable) received, any physical materials, machines, computers, raw materials, software that was purchased through the procurement request or provided to the startup by the University. This shall not include services provided such as training, coaching/mentorship, or donations made by third party to the startups;
- d) up on successful graduation from the TBIC and the completion of the term under this agreement, any equipment, or materials, acquired from the ILTTO shall remain the property of the University;
- e) after satisfactory graduation from the TBIC, the startups shall be eligible to receive post-incubation services;

10) Language

The agreement shall be implemented in English.

11) Miscellaneous

This article shall capture any miscellaneous provisions relevant to effectuate the agreement and shall be formulated to the best interest of both parties.

12) Witnesses

Duly authorized representative of each of the parties has to initiate to execute the agreement as of the date to be specified.

13) Representation, Witness, and Signing

The startups shall assign a representative or formal delegate, who shall be responsible to sign the contract agreement. For the same purpose, the AAU shall be represented by the ILTT director. Before the final signing, the contents of the agreement shall be checked by the office law services of AAU. The agreement shall be signed and dated by formal delegates of each party, along with three (3) other individuals to bear witness.

Appendix-7: Invention Disclosure

The following points shall be included for the invention disclosure to be claimed/requested by the innovator.

AAU-VPRTT-ILTTO

Form No.: TT00**

Checklist for Invention Disclosure¹²

1) General

Under this section of the invention disclosure shall provide background information about the IP services of ILTTO.

2) Main content to be disclosed by the inventor:

- a) name(s), date and signature(s) of the inventors(s) (and co-inventor(s), if any)
- b) contact information, professional details of the inventor(s), applicant(s) or legal agent
- c) type of request: patent or utility model certificate
- d) title of the invention/minor-invention
- e) an abstract about the invention, including keywords that would help the IP expert in the patentability assessment
- f) when and where (lab/department/school/institute/college, etc.), and how (joint/independent research, thesis, internship/externship, etc.) the invention was made
- g) background of the invention: field of the invention, description of prior art, detailed description of the invention, claims, etc.
- h) drawings (if applicable) clarifying technical information about the invention
- i) related literature and any patent searches made to assist the ILTTO in assessment of patentability
- j) any sponsorship, partnership, fund, grant, loan received, resources utilized, etc. during the course of the invention
- k) any information about public disclosure in the form of, printed or electronic publication, conference/public presentation as oral or poster, book of abstracts, student theses, etc. that could be directly or indirectly related to the invention
- l) previous attempts of disclosure of the invention to the ILTTO or anywhere (if applicable)
- m) declaration on the correctness of information provided including the agreement (in the form of minutes of meeting, dated and signed, etc.) of the other team members on the list of inventors or co-inventors, (if applicable)
- n) any other support information that strengthens the claim

3) Confidentiality

The ILTTO shall keep strictly confidential and shall not disclose any documentation or data or information or materials or any audio-visual outputs related to the claims of the inventor, and

¹² Adapted from: "Open Call Guidelines, European Space Agency's Business Incubation Centre, Redu, Belgium"

shall mark as “Confidential Information”, and communications within or ILTTO team members, or the TAC members or to any third party whatsoever, unless the disclosure of such information doesn’t cause IP infringement and is required under law or the order of any court of law, in which case the ILTTO shall first inform the inventor before disclosing any information. In respect of certain information to be revealed for patent assessment and potential subsequent commercialization reasons, the evaluator shall agree to keep such information confidential, and the ILTTO shall request the evaluator to sign a non-disclosure agreement.

4) Governing Law and Dispute Resolution

The contract agreement shall be governed by the laws of the Federal Democratic Republic of Ethiopia. Any dispute arising out of or relating to the contract agreements amongst the different parties or failure to abide by or the breach thereof by any of the parties or which the parties are unable to resolve on their own, shall be governed according to the laws of the Federal Republic of Ethiopia.

5) Language

This disclosure form shall be implemented in English.

6) Miscellaneous

This article shall capture any miscellaneous provisions relevant to the ILTTO to for the process evaluating the patentability, protection, and subsequent commercialization of the invention.

7) Representation, Witness, and Signing

The inventor or a representative or formal delegate of the inventors, shall be responsible to sign on the disclosure form. For the same purpose, the AAU shall be represented by the ILTT director. Before the final signing, the contents of the license agreement shall be checked by the office law services of AAU. The disclosure form shall be signed and dated by formal delegates, along with two (2) other individuals to bear witness.

Appendix-8: Patent License Agreement

The purpose of the license agreement is for IP management (protection and commercialization), specifying duties and responsibilities of each party, clarifying restrictions for sub-licensing, setting mechanisms for product development and marketing activities, setting license period, setting confidentiality issues, asserting revenue sharing rates and modalities, issues on dispute resolution, language, witness, et.

The following key points shall be used as guidance and due diligence checklist in the preparation of patent license agreement to be signed by the licensor (ILTTO), the patent owner and the licensee (industry).

AAU-VPRTT-ILTTO
Form No.: TT00**
Template for Patent License Agreement¹³
<p>1) General Under this section, the patent licensing agreement here after referred to as the “license agreement” to be signed by the licensor (ILTTO), the patent owner and the licensee (industry), known here after as “parties”, shall provide background information about the IP services of ILTTO.</p> <p>2) Main Provision This section of the agreement shall contain the parties involved, effective date, preamble, definitions, standard requirements for management of patent protection and commercialization, rights and responsibilities of each party, and any other provision, which the parties agree are relevant for license agreement to be made between them.</p> <p>3) Research and Development In case the industry requires further research and development of the product at the University, or the at the research facility of the industry, it shall be clarified as to who provides further funding for research and how long shall be allocated for product development.</p> <p>4) Sub-licensing The parties shall make it clear on the agreement whether the licensee is allowed to sub-licensing or not.</p> <p>5) Confidentiality Unless otherwise agreed to in prior written consent, the Parties agree to keep strictly confidential and shall not disclose any documentation or data or information or materials or any audio-visual reports or outputs related to the core activities of either party, whether marked or un-marked (as “Confidential Information”), to any third Party whatsoever, unless the disclosure of such information by either Party is required under law or the order of any court of law, in which case such Party shall first inform the other Party before</p>

¹³ Adapted from: “Open Call Guidelines, European Space Agency’s Business Incubation Centre, Redu, Belgium”

disclosing any of the other Party's information. In respect of certain information that either Party may reveal to the other Party, the other Party hereby agrees to keep such information confidential, and the donor Party may require the recipient to sign a non-disclosure agreement.

6) Revenue Sharing

The revenue sharing shall be administered in accordance to the provision on revenue sharing scheme asserted in section 10.2 of this manual. The parties shall make it clear on the agreement about the type of revenue (net revenue), up-front payments, royalty fee, the amount (in % or in figure), the currency, effective date for payment to start and proceeding dates/schedule of payment, when and how to report about the net revenue on sales, when and how to report invoice, etc.

7) Royalties

- a. The licensee shall pay to AAU a non-refundable royalty fee of [amount] ETB upon execution of this agreement.
- b. The licensee shall pay to AAU during the term of this agreement a royalty of (number) percent ([number]%) of net sales.
- c. The licensee shall pay to AAU the royalty on net resale from sales between licensee and its affiliates for resale.
- d. The licensee shall pay the royalty fee to AAU's bank account number ***, no later than first day of each calendar year after the effective date of this agreement.

8) Term and Termination of Agreement

The license agreement may specify the term in years (for instance based on the expiry of the patent granted) or such terms may be negotiated to the mutual benefit the parties. In other words, the agreement, unless terminated as provided herein, shall remain in effect until the patent has expired.

In addition, the agreement shall provide explicit conditions upon which either party may terminate the agreement.

The following conditions shall persuade AAU to terminate the agreement:

- a. if the licensee violates any of the terms and conditions of the agreement; or commits any fraud, theft or any other offence punishable under law; or ceases to make satisfactory progress on product development or marketing; or
- b. if licensee breaches the condition on royalty payments specified under article 7 of this agreement and fails to make payments or keeps reducing the share of AAU, then AAU shall give notice in writing, and sixty (60) days after the date of notice in writing of such non-payment or reduced-payment, by AAU.

9) Governing Law and Dispute Resolution

The contract agreement shall be governed by the laws of the Federal Democratic Republic of Ethiopia. Any dispute arising out of or relating to the contract agreements amongst the different parties or failure to abide by or the breach thereof by any of the parties or which the parties are unable to resolve on their own, shall be governed according to the laws of the Federal Republic of Ethiopia.

10) Language

This license agreement shall be implemented in English.

11) Miscellaneous

This article shall capture any miscellaneous provisions relevant to effectuate the agreement and shall be formulated to the best interest of both parties.

12) Representation, Witness, and Signing

The licensee shall assign a representative or formal delegate, who shall be responsible to sign the license agreement. For the same purpose, the AAU shall be represented by the ILTT director or the VPRTT or the president. Before the final signing, the contents of the license agreement shall be checked by the office law services of AAU. The agreement shall be signed and dated by formal delegates of each party, along with three (3) other individuals to bear witness.

Appendix-9: TT Procurement Request/Plan of Tenants Hosted at AAU- TBIC

Template for Procurement Request by Tenants Hosted at AAU- TBIC

Date (dd/mm/yyyy):

___/___/___

TT Procurement Request/Plan

Page ___ of ___

Basic Information

Procurement plan period

Title of the Project:

Stage/level of the
Project

Idea level

Early-stage prototype

Pilot stage

Names, contact details,
and signature of the
project members

PI's Name: _____

PI's Signature: _____

College/Institute/School:

Contact Address:

Mobile: _____

E-mail: _____

Co-PI's Name (if any): _____

Co-PI's Signature: _____

College/Institute/School:

Contact Address:

Mobile: _____

E-mail: _____

Team Member's Name (add list as needed):

Signature: _____

College/Institute/School:

Contact Address:

Mobile: _____

E-mail: _____

Reasons for requesting procurement:

Procurement Plan to be reviewed by the technical advisory committee (TAC)

Item: service or material	Description of item/specification	Purpose	Qty. (pcs)	Estimated unit cost per pcs (ETB)	Total cost (ETB)	Specific remark by TAC
Contingency						
Total						

Submitted by Name: _____

Signature: _____ Date: _____

General remarks by The TAC:

_____ Decision of TAC: _____

Name and Signature of the reviewing TAC members:

1. Name: _____ Signature: _____ Date: _____

2. Name: _____ Signature: _____ Date: _____

3. Name: _____ Signature: _____ Date: _____

Appendix-10: Tenant Coaching/Mentorship Request

AAU-VPRTT-ILTTO			
Form: TBIC00**			
Template for Tenant Coaching/Mentorship Request			
S. N.	Date (d/m/y): ____/____/____	Tenant Coaching/Mentorship Request	Page ____ of ____
1	Title of the Startup/Project: _____.		
2	PI's Name: _____ School/Department: _____ Address: Mobile: _____ E-mail: _____	Co-PI-1's Name (If applicable): _____ School/Department: _____ Address: Mobile: _____ E-mail: _____	
3	Duration of stay in the TBIC since admission date: _____		
4	Estimated time left in the TBIC: _____		
5	Project status: Estimated percent complete (activity) _____		
6	Achievements/project progress description: _____ _____ _____		
7	Type of coaching/mentorship requested: _____ _____		
8	Reasons for requesting coaching/mentorship: _____ _____ _____		
9	Proposed day for the coaching/mentorship: _____ Proposed length of time (frequency) for coaching/mentorship: _____ _____ Proposed place for coaching/mentorship: _____		

10	<p>Problems or unanticipated events encountered during project:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Measures/actions takes:</p> <p>_____</p> <p>_____</p> <p>_____</p>
11	<p>Work plan for remaining activities (use extra sheet, if need be):</p> <p>_____</p> <p>_____</p> <p>_____</p>
12	<p>Additional remark (if any):</p> <p>_____</p> <p>_____</p> <p>_____</p>
13	<p>Confirmation of correctness of information provided above:</p> <p>Name of PI: _____ Date: ____/____/____</p> <p>Signature: _____</p>
14	<p>Approval:</p> <p>1. Name of TBIC-expert: _____</p> <p>Signature: _____ Date: ____/____/____</p> <p>2. Name, ILTT Director: _____</p> <p>Signature: _____ Date: ____/____/____</p>

Appendix-11: Tenant Coaching/Mentorship Report

AAU-VPRTT-ILTTO			
Form: TBIC00**			
Template for Tenant Coaching/Mentorship Report			
S. N.	Date (d/m/y): ____/____/____	Tenant Coaching/Mentorship Report	Page ____ of ____
1	Title of the Startup/Project Coached/Mentored: _____.		
2	Name of the Coach/Mentor: _____ _____ Areas of specialty/experience/profession/business/: _____ _____ Address: Mobile: _____ E-mail: _____	Name of Tenant(s) Coached/Mentored: 1. _____ 2. _____ (add list if needed)	
3	Is this the first encounter with the tenant? _____ (Yes/No) If “No”, please specify _____		
4	Duration of the coaching/mentorship provided: _____		
5	Type of coaching/mentorship provided: _____ _____		
6	Estimation/impression on the level of competency of tenant on the coaching/mentorship type requested: _____ _____ _____		
7	Recommendations for the tenant: _____ _____ _____		
8	Recommendations for the ILTTO: _____ _____		

9	Proposed/preferred next schedule for coaching/mentorship: _____ Proposed/preferred length of time (frequency) for coaching/mentorship: _____ Proposed/preferred place for coaching/mentorship: _____
10	Additional remark (if any): _____ _____ _____
11	Confirmation of correctness of information provided above: Name of Coach/Mentor: _____ Signature: _____ Date: ____/____/____

Appendix-12: TT Project/Startup Progress Reporting¹⁴

AAU-VPRTT-ILTTO												
Form: TBIC00**												
Template for TT Project/Startup Progress Reporting												
Date(d/m/y): ___/___/_____		Page ___ of ___										
S. N.	Contents of the Progress Report	Remark										
Basic Information												
1	Title of the TT Project: _____ _____.											
2	<table border="0" style="width: 100%;"> <tr> <td style="width: 25%; vertical-align: top;">Names, contact details, and signature of the project members</td> <td> PI's Name: _____ PI's Signature: _____ College/Institute/School: _____ Contact Address: _____ Mobile: _____ E-mail: _____ </td> </tr> <tr> <td></td> <td> Co-PI's Name (if any): _____ Co-PI's Signature: _____ College/Institute/School: _____ Contact Address: _____ Mobile: _____ E-mail: _____ </td> </tr> </table>	Names, contact details, and signature of the project members	PI's Name: _____ PI's Signature: _____ College/Institute/School: _____ Contact Address: _____ Mobile: _____ E-mail: _____		Co-PI's Name (if any): _____ Co-PI's Signature: _____ College/Institute/School: _____ Contact Address: _____ Mobile: _____ E-mail: _____							
Names, contact details, and signature of the project members	PI's Name: _____ PI's Signature: _____ College/Institute/School: _____ Contact Address: _____ Mobile: _____ E-mail: _____											
	Co-PI's Name (if any): _____ Co-PI's Signature: _____ College/Institute/School: _____ Contact Address: _____ Mobile: _____ E-mail: _____											
3	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">PI's Name: _____</td> <td style="width: 50%;">Co-PI's Name (If any): _____</td> </tr> <tr> <td>Coll/Sch. _____</td> <td>_____</td> </tr> <tr> <td>Dep/Chair _____</td> <td>_____</td> </tr> <tr> <td>Email: _____</td> <td>_____</td> </tr> <tr> <td>Mob. _____</td> <td>_____</td> </tr> </table>	PI's Name: _____	Co-PI's Name (If any): _____	Coll/Sch. _____	_____	Dep/Chair _____	_____	Email: _____	_____	Mob. _____	_____	
PI's Name: _____	Co-PI's Name (If any): _____											
Coll/Sch. _____	_____											
Dep/Chair _____	_____											
Email: _____	_____											
Mob. _____	_____											
	Other partner/collaborating organizations (if any)											

¹⁴ Adapted from: "A Technology Transfer Procedure/Workflow for Ethiopian Universities, prepared by Sustainable Training and Education Program (STEP), The German Organization for Cooperation, GiZ, in collaboration with MoE, draft, (2017)", AAU-ILTTO TBIC: "Call for Female-only Innovation Competition, 2022", and "Open Call Guidelines, European Space Agency's Business Incubation Centre, Redu, Belgium".

4	Contact person: _____ Add. Mob. _____ Email: _____ Role in the project: _____	
5	Project duration since admission date: _____ From _____ to _____ Reporting period (Annual, Semi-annual, Mid-term, or Final): _____	
6	Short description or executive summary of the project/business idea (appropriate for non-experts and appropriate for publication but without confidential information/data) (max. 500 words): _____ _____ _____ _____	
7	i. Describe the financial source of the project: ⇒ The project requires total estimated budget of Birr _____ (in words) during the incubation period (attach breakdown). ii. Sources of finance: ⇒ Own sources (self-financing): Birr _____ ⇒ Seeking grant from AAU-TBIC: Birr _____ ⇒ Grant secured from _____ : Birr _____ ⇒ Bank loan from _____ : Birr _____ iii. The total business investment cost of the project/start-up after the incubation period: Birr _____ (in words) (attach breakdown). iv. Financial expenditure for reporting period by budget item (attach any receipts): _____ v. Estimated percent completion (procurement budget, if requested): _____	
8	Progress on major project components (max. 500 words): (over all description of progress and achievements/outputs with respect to developments of prototype, customer, market link, fund raising, etc., attach the latest business model and business plan)	

	<hr/> <hr/> <hr/> <hr/> <hr/> <p>Estimated percent completion of activities: _____</p>	
9	<p>Business development services, meetings with coaches/mentors, trainings, etc. received and/or planned:</p> <hr/> <hr/> <hr/>	
10	<p>If any major decisions/changes were made or planned, such as: IP disclosure, any negotiation with third party for funding or sales, decision to quite or extend the stay in the TBIC, etc.</p> <hr/> <hr/> <hr/> <hr/>	
11	<p>Problems or unanticipated events encountered during project:</p> <hr/> <hr/> <hr/> <p>Measures/actions takes:</p> <hr/> <hr/> <hr/>	
12	<p>Work plan for remaining activities (use extra sheet, if need be):</p> <hr/> <hr/> <hr/>	
13	<p>Any presentations, demonstrations or leaflets/brochures made within or outside the TBIC, or at AAU research week to the TAC members, visitors, researchers, investors, media outlets, etc.</p> <p>Date and Place:</p> <hr/> <hr/> <hr/> <p>Title: _____</p>	

14	Additional remark (if any): _____ _____	
15	Confirmation of correctness of information provided above Name of PI, or formal representative: _____ Signature: _____ Date: ____/____/_____	
16	Approval 1. Name of TBIC-expert: _____ Signature: _____ Date: ____/____/_____ 2. Name, ILTT Director: _____ Signature: _____ Date: ____/____/_____	
NB: Additional supporting documents can be attached with this form for more clarification of the progress report (such as: technical and financial records, invoices, documents related to sales made, donations/funds received, loans taken, latest business model and business plan, presentations, leaflets/brochure, audio-visual outputs, etc.)		

Appendix-13: Templates for Engagement of Internal and External Stakeholders

It is the duty and responsibility of the ILTT team to plan and implement stakeholder engagement mechanisms with clear goals.

Table A-2: Summary of internal and external stakeholders along with the goals for engagement and strategies for engagement.

Type	Stakeholder/ Partner	Goal	Engagement Strategy
Internal	Academic Staff	<ul style="list-style-type: none"> - Maximize awareness and participation; - Utilize knowledge and expertise; - Increase innovation culture; - Contribute to accomplish TT mission; - Generate revenue and impact; 	<ul style="list-style-type: none"> - Organize mindset and skills trainings on creativity, innovation and entrepreneurship; - Encourage research commercialization; - Facilitate IP acquisition; - Motivate with incentives/rewards; - Advocate and acknowledge volunteerism; - Prioritize in selection, maximize retention and utilize successful tenant graduates
	Students	<ul style="list-style-type: none"> - Maximize awareness and participation - Increase innovation culture - Foster self-employment - Maximize industry engagement 	<ul style="list-style-type: none"> - Organize mindset and skills trainings on creativity, innovation and entrepreneurship - Motivate with incentives/rewards - Prioritize in selection, maximize retention and utilize successful graduates
	Labs, workshops, and facilities (ICT, Smart-Class)	<ul style="list-style-type: none"> - Create opportunities for prototyping - Utilize knowledge and expertise - Mobilize/allocate resources 	<ul style="list-style-type: none"> - Capacitate facilities - Motivate partnerships with incentives/rewards
	AAU's Centers of Excellence (FabLab, innovation center, Centers of Excellence for entrepreneurship)	<ul style="list-style-type: none"> - Create awareness and increase participation - Create opportunities for prototyping 	<ul style="list-style-type: none"> - Facilitate co-creation of skills and knowledge in entrepreneurship and innovation - Capacitate facilities, reward partnerships

	Development, CoEE)		
External	Governmental Organizations (MoE, MInT)	<ul style="list-style-type: none"> - Assist to achieve mission - Reduce youth unemployment - Get innovation fund - Increase IP protection and commercialization 	<ul style="list-style-type: none"> - Providing policy guidance and implementation framework - Create partnership - Organize events for training and innovation fair/exhibition
	Industries, Industry parks, Businesses, Banks	<ul style="list-style-type: none"> - Increase revenue streams - Create opportunities for prototyping - Create market link for start-ups - Create appropriate public-private partnership - Get access to equity, loan and fund 	<ul style="list-style-type: none"> - Organize consultancy to industries and business - Organize industry sponsored innovation challenges - Create panel of mentors, business experts and investors - Organize events for professional networking
	Higher education institutions	<ul style="list-style-type: none"> - Share experiences (knowledge, skills and best practices) - Share human and material resources - Increase collaboration 	<ul style="list-style-type: none"> - Organize University innovation alliances - Organize joint events fostering culture and practice of innovation
	International community	<ul style="list-style-type: none"> - Get experiences (knowledge, skills and best practices) 	<ul style="list-style-type: none"> - Create international networks and connectivity channels - Arrange virtual and physical platforms to experiences (knowledge, skills and best practices)
	Donors, Development Agencies, NGOs	<ul style="list-style-type: none"> - Get innovation fund - Create socio-economic impact 	<ul style="list-style-type: none"> - Create platforms and themes for collaboration through UN SDG, AU agenda 2063
	Alumni	<ul style="list-style-type: none"> - Get experiences (knowledge, skills and best practices) - Increase opportunities for networking, funding and market link 	<ul style="list-style-type: none"> - Create database - Organize virtual and physical platforms

Appendix-14: Templates for Analysis of Internal and External Stakeholders

Engagement of stakeholder (internal and external to AAU-TBIC) shall be built and strengthened with periodic assessment of the business/commercial opportunities, market links, and business development services. The following table shall be used by the ILTT director as a tool/template for the analysis of potential internal and external stakeholders of the incubation center of AAU along with proposed category/priority level, collaboration type, and collaboration frequency/strength.

Table A-3: Template for the analysis of potential internal and external stakeholders/partners of AAU-TBIC, along with priority level, contribution type and collaboration frequency/strength¹⁵.

S. N.	Category/ Priority (A=highest, C=lowest)	stakeholders/ partners	Contribution					Collaboration frequency/Strength; (H=highest, M= Medium L= lowest)
			Training	Mentorship	Finance	Technology / Manufacturing/ Prototyping	Market Link/ IP and Research Commercialization	
External stakeholders/ partners								
1	A	Agricultural Transformation Agency						
2	A	Chamber of commerce						
3	A	Venture capitalists, (Kazana group, Ovid group, 1 st Consult)						
4	A	Entrepreneurship Development Center (EDC)						
5	A	Industrial park						
6	A	Ministry of Innovation and Technology (MInT)						
7	A	Public and Private incubators: (ICT park, ICE Addis, Creative Hub Addis)						
8	A	Addis Ababa City Administration						
9	A	Tech-preneurs						
10	B	(Devt Part.) - United Nations						

¹⁵ Adapted from: “Mekelle University, Business Incubation Center Manual, 2019 (draft)”

		Development Program						
11	B	(Devt Part.)- EU						
12	B	(Devt Part.)- GIZ						
13	B	(Devt Part.)-AU						
14	C	(Devt Part.)- Save the Children						
15	C	(Devt Part.)- USAID						
16	B	Microfinance Organizations						
17	B	Private Banks: (Dashen Bank, Awash Bank)						
18	B	Public Banks: (Commercial Bank of Ethiopia, Development Bank of Ethiopia)						
19	C	Accountants						
20	C	Private Investors						
21	C	Ethiopian IP Authority						
22	C	Business Consultants						
23	C	Technology Companies						
24	C	Insurance companies						
25	C	Lawyers						
Internal stakeholders/ partners								
1	A	Academic Staff						
2	A	Students						
3	A	Labs and workshops at different colleges and institutes						
4	A	center of excellence for entrepreneurship development (CoEE) @ CBE						
5	A	FabLab @ the school of fine arts						
6	A	Entrepreneurship center at EiABC						
7	A	innovation center at AAiT						

References

1. AAU, Intellectual Property Policy, 2015
2. AAU Senate legislation, 2019
3. AAU 10 years strategic plan, 2021
4. AAU, University Industry Linkage-policy, 2021
5. AAU, Community Engagement Guideline, 2019
6. AAU Policy and Guidelines on Research Incentives (2021)
7. AAU, Revitalizing Innovation and Incubation at AAU, 2022 (draft)
8. AAU, TBIC Establishment Document, 2013
9. A Technology Transfer Procedure/Workflow for Ethiopian Universities, prepared by Sustainable Training and Education Program (STEP), The German Organization for Cooperation, GiZ, in collaboration with MoE, draft, (2017)
10. Guideline for Permanent Open Call for Proposals for the European Space Agency's Business Incubation Centre, Redu, Belgium (2006)
11. Hawassa University, Intellectual Property Policy, version 1, 2017
12. <https://documents1.worldbank.org/curated/en/158861581492462334/pdf/A-Practitioner-s-Guide-to-Innovation-Policy-Instruments-to-Build-Firm-Capabilities-and-Accelerate-Technological-Catch-Up-in-Developing-Countries.pdf> (Accessed on June 4, 2022)
13. <https://www.astu.edu.et/offices/technology-transfer-and-community-service> (Accessed on June 4, 2022)
14. <https://www.cmu.edu/cttec/forms/spin-off-guidelines-cmu.pdf> (Accessed on June 18, 2022)
15. <https://www.hu.edu.et/index.php/administration/vice-president-offices/research-and-technology-transfer> (Accessed on June 4, 2022)
16. <https://www.strategyzer.com/canvas> (Accessed on June 23, 2022)
17. <https://www.ucd.ie/innovation/knowledge-transfer/innovative-business-opportunities/> (Accessed on May 6, 2022)
18. https://unctad.org/system/files/official-document/dtlstict2020d3_en.pdf (Accessed on June 6, 2022)
19. https://www.wipo.int/edocs/pubdocs/en/wipo_pub_transition_2_b.pdf (Accessed on June 4, 2022)
20. Ministry of Education, Directive for Technology Transfer, 2021
21. Ministry of Innovation and Technology, Guideline for National Innovation and Technology Research Council Establishment and for Research Support and Administration, 2021
22. Ministry of Science and Higher Education, Directive to define the roles and responsibilities of the actors in Higher Education and Training, Research Institutions and Industry Linkage (HETRIL) towards technology transfer, 2021
23. Ministry of Science and Higher Education, Higher Education and Training, Research Institutions and Industry Linkage (HETRIL) Regulation, 2021
24. Rustam Lalkaka: *Technology business incubation: a toolkit on innovation in engineering*,

science and technology, UNESCO Press, 2006

25. The Inventions, Minor Inventions and Industrial Designs, Proclamation, No. 123/ 1995
26. University of Salford Manchester, Intellectual Property Policy, version 1, 2016
27. University of Salford Manchester, Innovation and Commercialization Policy, 2019 (Draft)