



ANNEX C1: Twinning Fiche¹

Title of the project: “Support for the Development of Research and Innovation (IPTICAR)”

Beneficiary administration: Ministry of Higher Education – Algeria

Twining Reference: “DZ 21 NDICI OT 01 24 ”

Publication notice reference: Europeaid/180165/DD/ACT/DZ

This project is funded by the European Union

TWINNING TOOL

¹ The French version of the twinning fiche prevails.

Table of contents

<u>Acronyms</u>	3
1. <u>Basic Information</u>	4
1.1. <u>Programme</u>	4
1.2. <u>Twinning sector</u>	4
1.3. <u>European Union Funded Budget</u>	4
1.4. <u>Sustainable Development Goals (SDGs)</u>	4
2. <u>Objectives</u>	4
2.1. <u>Overall objectives</u>	4
2.2. <u>Specific objectives</u>	4
2.3. <u>Targeted elements in the strategic documents</u>	4
3. <u>Description</u>	6
3.1. <u>Background and justification</u>	6
3.2. <u>Ongoing reforms</u>	6
3.3. <u>Linked activities</u>	7
3.4. <u>List of applicable union acquis/standards/norms</u>	8
3.5. <u>Products and results by components</u>	9
3.6. <u>Means /input from the eu member state (MS) administration(s)</u>	11
3.6.1. <u>Profile and tasks of the PL</u>	11
3.6.2. <u>Profile and tasks of the RTA</u>	12
3.6.3. <u>Profile and tasks of results/outputs managers</u>	13
3.6.4. <u>Profile and tasks of the main Short Term Experts</u>	14
4. <u>Budget</u>	14
5. <u>Implementation arrangements</u>	14
5.1. <u>Responsible implementing agency</u>	14
5.2. <u>Institutional framework</u>	15
5.3. <u>Counterparts in the beneficiary administration</u>	15
5.3.1. <u>Contact person:</u>	15
5.3.2. <u>PL counterpart</u>	15
5.3.2. <u>RTA counterpart</u>	15
6. <u>Duration of the project</u>	15
7. <u>Management and reporting</u>	16
7.1. <u>Language</u>	
167.2. <u>Project</u>	
<u>Steering Committee</u>	16
7.3. <u>Rapports</u>	16
8. <u>Reporting</u>	16
9. <u>Cross-cutting issues</u>	17
9.1. <u>Parité hommes-femmes</u>	17
9.2. <u>Démocratie, bonne gouvernance et état de droit</u>	17
9.3. <u>Environnement</u>	17
10. <u>Conditionality and sequencing</u>	17
11. <u>Performance indicators</u>	18
12. <u>Available facilities</u>	18
<u>Annexes of the twinning fichee</u>	19
<u>Annex 1 :Level of an intervention logic</u>	21
<u>Annex 2 : Simplified logical framework (mandatory)</u>	22
<u>Annexe 3 : Estimated schedule</u>	32
<u>Annexe 4 : MESRS organization chart</u>	34
<u>Annexe 5 : MESRS institutional and legal framework</u>	36

Acronyms

AA	Algeria-EU Association Agreement
CBHE-ERASMUS +)	Capacity building Higher Education
EC	European Commission
TPM	Twinning Project Manager
PSC	Project Steering Committee
RTA	Resident Twinning Adviser
DZD	Algerian dinar
UED	Delegation of the European Union
DSP	Law on Political Sciences
STE	Short term Expert
MS (P)	Member State (partner)
EESR	Higher Education and Research Institutions
ERASMUS	European Action Scheme for the Mobility of University Students
ESRS	Algerian national higher education and scientific research system
GAR	Management Axed on Results
HERE	Higher Education Reform Experts
IOV	Objectively verifiable indicator
CTM	Common Twinning Manual
JRC	Joint Research Centre/Joint Research Centre
MESRS	Ministry of Higher Education and Scientific Research
DGRSDT	Directorate-General for Scientific Research and Technological Development
DCEU	Directorate for Cooperation and Universities Exchange
SDG	Sustainable Development Goals
PAG	Government Action Plan
BC	Beneficiary country
NCP	National Contact Points
EP	Establishment project
PRIMA	Partnership for Research and Innovation in the Mediterranean Area
PPPE	Professional and Staff Project of the Student
PM	Prime Minister
RADP	People's Democratic Republic of Algeria
HR	Human resources
PL	Twinning Project Leader
R & D	Research and development
R & I	Research and innovation
SNRI	National Research and Innovation System
RV	Component Leader
S & T	Science and technology
SWOT	Strengths/weaknesses/Opportunities/Threats
SHS	Human and Social Sciences Sector
TRL	Technology Readiness Level
EU	European Union

1. Basic information

1.1 Program CRIS No: NDICI-GEO-NEAR/2021/043-134 – direct management.

OPSYS NO: ACT-61071

1.2 Twinning Sector: Tertiary Education

1.3 EU funded budget: EUR 4 200 000

1.4 Sustainable Development Goals:

The main objective of this program is to contribute to SDG 4: *“Ensure equal access to quality education for all and promote lifelong learning opportunities”*, as well as the following SDGs:

SDG 5: *“Achieving gender equality and empowering all women and girls”*,

SDG 13 *“Take urgent action to combat climate change and its impacts”* and in particular: SDG 13.3 *“Improve education, awareness raising and individual capacities and Institutional on climate change adaptation, mitigation and reduction of impact and early warning systems”*.

2. Objectives

2.1 General objective:

The general objective of the project is to support the MESRS in the reforms initiated concerning the innovation of the engineering of European projects by promoting Algerian research in the European R &R;

2.2 Specific objectives:

In accordance with the Financing Decision, this program has four (04) specific objectives:

1. An appropriate governance in the National Research and Innovation System (SNRI) is put in place.
2. The flow of academic mobility to and from Algeria is increased.
3. Algerian participation in European research and innovation programs (R & I) is increased.
4. Euro-Algerian scientific cooperation in the Research and Innovation Area (R & I) is boosted.

2.3 The elements targeted in the strategic documents, i.e. the National Development Plan/Cooperation Agreement/Association Agreement/Sector Reform Strategy and related Action Plans:

According to the Sector Reform Strategy for Governance Renovation for More Performance and Transparency, as reflected in the Government Action Plan 2020-2024 ([plan-d-action-du-Gouvernement-2021-en.pdf](#)), the Algerian Ministry of Higher Education and Scientific Research has undertaken deep structural and regulatory reforms and has drawn up a sectoral action plan for six (06) main areas, namely:

1. Improving the quality of university education by revising the legislative framework governing the higher education sector, revising the map of academic training and the reorganization of the network of national higher schools in the form of poles of excellence.
2. Improving the quality of scientific research through the creation of incubators and supporting promoters of innovative projects for the creation of start-ups and entrepreneurship houses. Activating mechanisms for transferring research results to the socio-economic sector and providing incentives in the context of patent applications for invention and encouraging the gradual implementation of the R & D activity at the level of economic enterprises.
3. Improving student life through the establishment of a permanent monitoring system for students' living conditions at university residences. Intensify and develop sporting and cultural activity in academia, including through the development of a sporting student status.
4. Exploiting the potential of mentoring and research by setting up a new scheme for visiting researcher teachers. Increase the ownership of academic and research institutions in international cooperation programs according to the "win-win" principle and encourage the twinning of Algerian academic and research institutions with their foreign counterparts.
5. Improving university governance and modernizing it by setting up a National Quality Assurance Agency and the Authentication and Equivalence Agency and continuing the process of digitalization of the sector, by means of an integrated information system covering educational and research activities.
6. The moralization of academic life by equipping the Universities and Research Institutions with a regulatory framework establishing the culture of ethics and ethics in the academic space represented by the three components of the academic community, with the intensification of the outreach work of the ethics and ethics committees created for this purpose.

Thanks to the huge investments made by the Algerian State to develop its human capital, the university network has expanded according to a 'national spatial planning plan' to reach today:

- One hundred and twelve (112) academic institutions in 2023 spread throughout the national territory,
- 1 669 000 students, 66 % of whom are girls,
- 65 000 teachers/researchers,
- An estimated national average of one teacher per 23 students.

In addition to this network, Algeria has fifty-four (54) higher education institutions belonging to other ministerial departments with pedagogical supervision. In addition, eighteen (18) private higher education institutions in foreign science and technology, literature, languages, economic sciences, management, and business sciences strengthen the network of higher education institutions.

Article 51 of the AA, which entered into force on 1 September 2005, 'Scientific, technical and technological cooperation', states that 'the aim of cooperation shall be to promote the establishment of permanent links between the scientific communities of the two Parties, in particular through

- ✓ The access of Algeria to Community R & D programs, in conformity with existing provisions concerning the participation of third countries in those programs;
- ✓ The participation of Algeria in decentralized cooperation networks;

- ✓ The promotion of synergy between training and research;
- ✓ Strengthening research capacity in Algeria;
- ✓ Stimulating technological innovation, the transfer of new technologies and know-how, implementation of technological research and development projects and optimization of the results of scientific and technical research;
- ✓ Encouraging all activities aimed at establishing synergy at regional level.

3. Description

3.1 Context and justification:

The Ministry of Higher Education and Scientific Research is responsible for studying and proposing the necessary measures for the organization and development of the various levels of higher education, with a view to establishing a comprehensive and integrated system.

Universities are public institutions with a certain degree of autonomy. Education is available to anyone holding a baccalaureate or a level 4-degree. The general university studies lead to the bachelor's degree (three years after the baccalaureate), the master's degree (two years after the bachelor's degree), and the doctorate (three years after the master's degree).

Algeria has four types of higher education institutions:

53 universities, 09 university centers, 39 higher national schools, 13 higher standard schools, and 2 annexes.

Today, there is a list of research areas: 1733 laboratories, 30 centers, 43 units, 69 joint services, 31 experimental stations and 3 thematic research agencies and one 01 agency for the exploitation of research and technological development results.

Also, as part of strengthening entrepreneurship and promoting innovation, the national ESRS system has set up 17 AI houses, 94 university incubators and 84 entrepreneurship development centers.

3.2 Ongoing reforms:

The Ministry of Higher Education and Scientific Research program to organize national Assizes on the modernization of the University in November or December of the current year.

Local pre-conferences in the form of workshops have already taken place at the level of higher education institutions in April and June. Discussions took place with the participation of the entire academic community and the social partners, covering several aspects such as pedagogical management, governance, research and training, student life, cooperation, etc.

Regional summaries are already being prepared and the national summary is being finalized.

The main reforms envisaged by the MESRS include:

- Grouping of training areas.
- The creation of university hubs.
- Double diplomat.
- The 04-year license

In addition, medical science reforms should also be mentioned, among others, the recasting of programmers.

There are 06 targets to be achieved, namely:

1. Strengthening the quality of university education.
2. Promoting scientific research and innovation.

3. Review the university map.
4. Defining the social and societal responsibility of the university
5. Improve the visibility and attractiveness of the university.
6. Improve academic governance and employability of outgoing graduates.

In its 2020 Action Plan, the government expresses its willingness to change in a context of accelerating globalization and the emergence of new intellectual powers; and in this context, universities, large schools and research centers will be strongly supported to ensure their adaptation in order to become a framework for teaching, development and innovation and as real levers for the development of the knowledge economy.

The necessary transformations will be undertaken to ensure quality education, the formation of elites and reference research poles, capable of meeting the expectations of businesses, by offering them the human resource to enable them to position themselves in a globalized market.

Students are one of the main targets. One of the objectives is to enhance the quality of their training, the international visibility of their research and their capacity to innovate, so that they are integrated into a competitive labor market both nationally and internationally. The integration of **doctoral candidates, young researchers and senior researchers** into the European Research and Innovation Area is crucial, as they are the current and future players in the field of research to innovate in Algeria.

Ongoing reforms include the professionalization of curricula, the strengthening of business university relations, and the creation of innovation centers, to strengthen synergies with the socio-economic sector and foster graduate employment. The beneficiary also aims to strengthen the internationalization of Master's courses and the development of the innovation culture at Master and Doctoral level, and in engineering training.

The reform of doctoral training is ongoing; it can be developed by integrating the training of doctors on innovation issues and the engineering of European projects, in order to prepare future researchers to return to the European Research and Innovation Area (R & I). Doctoral training involving about 17.000 doctoral candidates is a major interest for MESRS. The expected results focus on the reform of Bachelor and Master level training, which affects more than 360.000 graduates per year, with training professionalization in the background.

3.3 Related activities:

3.3.1 EU-funded activities

- The higher education sector has benefited from an EU-funded twinning scheme which covered:
 - Support for the reform and modernization of the higher education and scientific research sector;
 - Capacity building for teachers and managers in the higher education and scientific research sector.

Twinning contract with Spain “Support for the Ministry of Higher Education and Scientific Research to strengthen the pedagogical skills of research teachers and the governance capacities of managers” started in July 2019 for 30 months, with a budget of EUR 1 600 000

— General objective: Provide high quality training to contribute to the development of the Algerian economy and to foster the creation of a globally competitive area of the knowledge-based economy.

— Specific objectives:

Strengthen the capacity of the MESRS in:

Adapting teaching methods to the competency-based approach

— Diversification of training opportunities

— Governance of institutions

This twinning, which focused its results on the governance of scientific research, in particular its result 3, focused on the pedagogical aspect.

- Erasmus + program: The Erasmus + program, which has taken over from the TEMPUS program since 2014, supports projects, partnerships, mobility and dialogue in education, training, youth and sport for the period 2014-2020. Building on the experience and success of existing programs, it aims to strengthen skills and employability, as well as the modernization of education, training and youth work in the EU and its partner countries around the world. Erasmus + has a strong international dimension, in particular in the fields of higher education and youth
- The Erasmus + program 2021-2027 continues on the momentum of its predecessor
- The Heres Program: The European Union supports the activities of the think tank of Higher Education Reform Experts (HEREs) in the partner countries. 10 people were selected as Heres and are invited to develop Bologna development strategies with peers, as well as non-academic bodies such as industrial, cultural or social organizations (V. www.erasmus.dz). Heres design and deliver training placements for other experts who are actively involved in promoting higher education reforms in their own country. They are also involved in promotion and awareness-raising activities. The Heres also provide advice to higher education institutions in the field of quality assurance, curriculum reform, national and European qualification frameworks, upgrading and international recognition and international recognition (i.e. ECTS, Diploma Supplement).
- Partnership for Research and Innovation in the Mediterranean region (PRIMA): PRIMA is an EU research and innovation framework program, officially launching calls for project funding in the thematic areas of water management, agricultural systems, agri-food value chain and nexus.

Its main objective is to develop new approaches to research and innovation to improve water availability and sustainable agricultural production in a region heavily affected by climate change, urbanization and population growth.

The partnership currently consists of 19 participants, including several countries in the South Mediterranean region (Algeria, Egypt, Jordan, Lebanon, Morocco, Tunisia).

3.4 List of applicable Union acquis/standards:

Strengthening EU-Algeria cooperation in science and technology through the implementation of the Scientific Cooperation Agreement signed between Algeria and

the EU in 2017 ([https://eur-lex.europa.eu/legal-content/FR/TXT/PDF/?uri=CELEX:22017A1201\(01\)&from=DE](https://eur-lex.europa.eu/legal-content/FR/TXT/PDF/?uri=CELEX:22017A1201(01)&from=DE))

Agreement between the European Union and the People's Democratic Republic of Algeria on scientific and technological cooperation (OJ L 99, 5.4.2012, p. 2 – 8)

Council Decision [2012/645/EU](#) of 10 October 2012 on the conclusion of the Agreement between the European Union and the People's Democratic Republic of Algeria on scientific and technological cooperation (OJ L 287, 18.10.2012, p. 3).

3.5 Components and results by component:

The project consists of four (04) components and mandatory results to be achieved:

Component 1: Governance of the National Research and Innovation System (SNRI):

- ❖ Result 1: The appropriate governance of the National Research and Innovation System (SNRI) is put in place

Component 2: Improving academic mobility by aligning Algeria's higher education with international quality standards and integrating it into the knowledge economy

- ❖ Result 2: The flow of academic mobility to and from Algeria is increased

Component 3: Participation in European research and innovation programs (R & I) with a particular focus on environmental research and climate change is increased

- ❖ Result 3: Increased participation in European research and innovation programs

Component 4: Euro-Algerian scientific cooperation in the Research and Innovation Area to facilitate the transfer of R & I skills and technology is boosted

- ❖ Result 4: EU-Algeria cooperation in the European and international research and innovation area is boosted.

*** Components 1 and 2 corresponding to results 1 and 2 will be implemented in French.**

*** Components 3 and 4 corresponding to results 3 and 4 will be implemented in English.**

- Output by results:

- ❖ Result 1: The appropriate governance of the National Research and Innovation System (SNRI) is established.
- R.1.1 MESRS and EESR have acquired the skills, methods and best practices to implement the three (3) products of the ongoing national R & I reform the Establishment Project (EP), the Student Staff and Professional Project (PPPE) and the establishment of the Results Axis Management (GAR).
- R.1.2 A Cooperation and Research Project Cell composed of approximately 10 people trained in their missions and the challenges of the forthcoming calls for

projects monitors and evaluates the integration of EESR into the European and international R & I area.

- R.1.3 A virtual platform is set up in the MESRS to monitor and evaluate Algeria's participation in European programs and calls for projects.
- R.1.4 "European project" cells are created in the EESR organization chart to encourage the participation of teachers/researchers.
- R.1.5 A communication plan for the dissemination of the results of the project makes the results of the project visible.

❖ Result 2: The flow of academic mobility to and from Algeria is increased

- R.2.1 Quality assurance, international openness and innovation are included in the school project (EP) and the Student Staff and Professional Project (PPPE), which will subsequently be integrated into the innovative training offer.
- R.2.2 Three innovative joint Masters courses are launched in three pilot sites, with European partnerships in 3 priority themes (AI (BigData and robotic mechatronics), E- governance and local development, and geomatics applied to urban studies).
- R.2.3 Facilities facilitating the development of innovation culture shall be implemented in at least one (1) pilot-lab (Engineering School), and the submission of a Capacity building project (CBHE-ERASMUS +) on innovation issues involves at least 12 EESR.

❖ Result 3: Increased participation in European research and innovation programs

- R.3.1 The network of NCPs (40 National Contact Points) is consolidated, trained and operational for Horizon Europe.
- R.3.2 A Horizon Europe-Algeria platform is operational, with the relevant content to accompany researchers.
- R.3.3 EESR has the knowledge to submit projects contributing in particular to climate change adaptation.
- R.3.4 The Legal, Human and Social Sciences (SHS) and Law of Political Sciences (DSP) sector is fully integrated and able to access European research programs and their societal challenges.
- R.3.5 Algerian research is integrated into international and European research networks.

❖ Result 4: EU-Algeria cooperation in the European and international R & I area is boosted.

- R.4.1 The Algerian EESR are integrated into 12 international research consortia and/or networks and participate in 12 European R & I projects.

- R.4.2 Technicians and engineers from 2 microelectronics and biotechnology research platforms are trained in platform optimization.
- R.4.3 The production of lakes is moving towards innovation with regard to the Technology Readiness Level (TRL).
- R.4.4 Technical Support Staff of the Innovation Centers in Bejaia, Tlemcen, Biskra are upgraded to develop synergies between the socio-economic sector and the EESR.

3.6 Means/input from the EU Member State Partner Administration (s) :

The implementation of the project requires a project manager who will be responsible for supervising and coordinating the Twinning project. It will be supported by a Senior Resident Twinning Adviser and a Deputy Twinning Resident Adviser who will work on site with the Beneficiary administration and who will be responsible for the management and implementation of the project activities. The lead RTA will work on components 1 and 2 corresponding to Results 1 and 2 to be implemented in French and the Deputy RTA will work on components 3 and 4 corresponding to Results 3 and 4 which will be implemented in English.

3.6.1 SC profile and tasks:

The Member State Project Leader must be a senior official in the twin administration or assimilated staff of a fully mandated body capable of conducting a dialogue at political level to achieve the objectives of the Twinning and capable of providing the necessary solutions to the problems encountered.

He/she will work with his Algerian counterpart to ensure the direction and coordination of the whole project. It will have the capacity and responsibility to mobilise short-term experts to support the implementation of the planned activities.

❖ He or she will have:

- A minimum Master's degree or equivalent professional experience of 8 years
- A minimum of 3 years of specific experience in activities related to the management of the development, implementation, evaluation or monitoring of the evaluation of public policies for the management of research and innovation in higher education;
- Excellent command of written and spoken French and good command of English, read, spoken and written.

It is also desirable that the project manager has led or contributed to the management and monitoring of a similar project.

The project manager is responsible for the activities assigned to his administration in the work plan and must be available for the project at least three days per month, with an on-site visit at least every three months to participate in the steering committee.

The involvement of the Member State Project Leader is expected when preparing the Member State's proposal and the SC's participation in the selection meeting is mandatory, as well as participation in the quarterly meetings of the Project Steering Committee. Participation in certain communication and visibility activities is expected (Twinning Manual Section 5.7).

He/she must organize with his counterpart Algerian project leader the meetings of the Steering Committee, which they will co-chair. The Steering Committee, meeting on a quarterly basis, will make it possible to take stock of the progress of the project in relation to the expected results.

He/she will be the person responsible, in liaison with the Algerian project manager, for submitting the quarterly reports and the final project report to the European Union Delegation to Algeria.

The project manager will work closely with the Algerian project manager to ensure that the project as a whole is managed and coordinated. Each of them will be responsible for the activities assigned to their administration in the agreed work plan and will have full authority over the human and material resources mobilized for this purpose.

The Resident Twinning Advisors, who will work on the spot with the Beneficiary Administration, support the Project Leader of the Member State.

3.6.2 RTA profile and tasks:

Two Resident Twinning Advisers (RTAs), civil servants or employees of a public institution or mandated body of a Member State will be appointed and will work under the supervision of the MS Project Leader. They will be called upon to work full-time in Algeria throughout the duration of the twinning. The lead RTA will work on components 1 and 2 corresponding to Results 1 and 2 that will be implemented in French and the Deputy RTA will work on components 3 and 4 corresponding to Results 3 and 4 that will be implemented in English.

If the proposal indicates a consortium, the RTA from the leading Member State will be the lead RTA.

❖ The main RTA will have to fulfil the following criteria:

- A university degree of at least master level or equivalent professional experience of 8 years
- A minimum of 3 years of specific experience in activities related to the management of the development, implementation, evaluation or monitoring of the evaluation of public policies for the management of research and innovation in higher education;
- Excellent command of French written and spoken.
- Skills to manage a complex project, lead a team and ensure optimized communication,
- Experience in the implementation of cooperation projects, particularly at international level, is an asset.
- Good knowledge of written and spoken English

❖ The Deputy RTA will have to fulfil the following criteria:

- A minimum Master's degree or equivalent professional experience of 8 years
- A minimum of 3 years of specific experience in activities related to the management of the development, implementation, evaluation or monitoring of the evaluation of public policies for the management of research and innovation in higher education;
- Excellent command of written and spoken English.
- Skills to manage a complex project lead a team and ensure optimized communication,

- Experience in the implementation of cooperation projects, particularly at international level, is an asset.

- Good knowledge of written and spoken French

The CRJs will be seconded and will have to work permanently in the beneficiary country throughout the duration of the project. Where duly justified, if necessary and relevant for the effectiveness of the project or to support specific issues of high importance (based on expertise, strategic, etc.), there may be short-term RTA assignments in the country (in accordance with the provisions of the Twinning Manual).

The Principal Resident Twinning Adviser, with the help of the Deputy Resident Twinning Adviser, will organize and conduct technical support in close cooperation with their Algerian counterparts all the operations provided for by the project. They must ensure that they continuously coordinate the overall implementation of the project activities with regular updates.

They will be responsible for coordination between experts and supervision of all technical aspects. They will ensure communication with the project leader and the steering committee that will be set up as part of the project to ensure coordination between the various stakeholders.

RTA counterpart:

The Beneficiary Administration will designate two RTA counterparts, who will act as the counterpart of the lead and deputy RTAs of the MS and ensure close cooperation on the day-to-day implementation of the Twinning project tasks on the beneficiary side. The role of MS RTAs and BC RTAs is complementary.

- RTA Assistants:

This twinning requires the recruitment of three full-time assistants:

1 – Technical and organizational senior RTA assistant: whose role is to support the lead RTA in the management of the project, will be responsible for the organization of meetings, seminars and other meetings and their logistics.

2- Assistant to the Deputy Technical and Organizational RTA: whose role is to support the Deputy RTA in the management of the project, will be responsible for the organization of meetings, seminars and other meetings and their logistics.

Until the CRJs can select and hire their assistants, the beneficiary administration shall make available a member of its staff to assist both CRJs in their daily tasks.

3- Language assistant: in charge of translation and interpretation on a daily basis, working documents only during activities where necessary.

These three posts will be committed in accordance with the rules of the Twinning Manual (see section 4.1.6.10) and paid from the Twinning budget. The provisions on the recruitment of the RTA assistant (section 6.2) also apply to the recruitment of the language assistant.

3.6.3 Profile and tasks of the Component Leaders:

For each of the 4 expected results, a component manager must be proposed. It must be present on the mission site for a sufficient period for the implementation of the contract.

These key experts will follow all the output activities for which they are responsible and must be able to provide expert advice and coordinate and ensure the implementation of the activities foreseen in each component of the project. Working closely with the two RTAs, they will contribute to the programming, organization and monitoring of activities, management of experts and reporting.

The standard profile of the component managers should be:

- A university degree of at least master level or equivalent professional experience of 8 years
- A minimum of 3 years of specific experience in activities related to the theme of the strand
- have significant experience in teamwork, in particular in the implementation and monitoring of multi-sector development projects;
- have satisfactory experience in project management;
- excellent command of French written and spoken for VRs Nos 01 and 02 and excellent command of English written and spoken for VRs Nos 03 and 04.

3.6.4 Profile and tasks of other short-term experts:

The Member State will mobilize a team of short-term experts (STE). The required profile is as follows:

- Specialties in accordance with the implementation of the four (04) results of this project;
- Have a university diploma of a higher level and equivalent professional experience of at least eight years in the specialties in accordance with the four results set out in this fiche;
- At least 3 years' experience in the field relevant to the mission,
- Knowledge of English and/or French is required (spoken, written) and computer skills.
- Have pedagogical skills in order to ensure the sharing of experience and the transfer of technical skills.

3.6.5. Translation and interpreting

Two parts of the contract will be carried out in English. In fact, the Member State will provide a budget to cover translation and interpretation costs relating to the implementation of the activities and will take all the necessary steps to ensure adequate translations and interpretations for the performance of the activities, as well as for the translation of working documents.

The relevant provisions concerning eligible costs and those necessary for the implementation of the project to be included in the Twinning budget are set out in section 6.2 of the Twinning Manual.

Translation and interpretation services: according to Annex A1 of the Twinning Manual, the official language of the project is that used as a contractual language (French). All formal communications concerning the project, including interim and final reports, must be in the language of the contract.

4. Budget

EUR 4 200 000

5. Implementation Arrangements

5.1 Implementing Agency responsible for tendering, contracting and accounting:

European Union Delegation (EUD) is the contracting authority for this Twinning project and is responsible for its administrative and financial management.

The EUD is located at:

Benouadah Domain, Rue 11 December 1960, El Biar Algiers

It is represented by Mr. Thomas ECKERT, Ambassador, Head of the Delegation of the European Union.

Contact person:

Safia OUAHMED, Cooperation Officer, Safia.OUAHMED@eeas.europa.eu

5.2 Institutional framework:

The beneficiary institution is the Ministry of Higher Education and Scientific Research.

The two administrations concerned are:

- The Department of Cooperation and University Exchange (DCEU)
- The General Department of Scientific Research and Technological Development (DGRSDT).

The Sub-Directorate for University Cooperation and Research Programs will coordinate by means of communication and correspondence.

5.3 Counterparts in the Beneficiary administration:

5.3.1. Contact person:

The contact person is:

Dr CHADER Samira.

Head of Academic Cooperation and Research Programs

Directorate of Cooperation and University Exchange

Ministry of Higher Education and Scientific Research

11 Doudou Mokhtar Street. Ben Aknoun. Algiers.

5.3.2. Counterpart to the PL

PR Hamdi Rachid.

Directorate of Cooperation and University Exchange

Ministry of Higher Education and Scientific Research

11 Doudou Mokhtar Street. Ben Aknoun. Algiers.

5.3.3. RTA counterpart

Dr Richa Amina

Head of Research and Foresight Programming

General Directorate of Scientific Research and Technological Development

Ministry of Higher Education and Scientific Research

128, chemin Gacem Mohamed, El Madania, Algiers.

Mr ZEBOUCHI Mohamed Abderraouf

Deputy Director of Postgraduate Training at the

General Directorate of Education and Training

Ministry of Higher Education and Scientific Research

11 Rue Doudou Mokhtar. Ben aknoun. Alger.

6. Duration of the project

24 months

7. Management and reporting

7.1 Language

The official language of the project is that used as a contractual language for the instrument (French). All official communications concerning the project, including interim and final reports, shall be in the language of the contract and the steering committees will be conducted in the same language.

Translations of working documents into EN/FR/AR and interpreting will be provided and covered by the project.

7.2 Project Steering Committee

A project steering committee (PSC) shall oversee the implementation of the project. The main duties of the PSC include verification of the progress and achievements via-à-vis the mandatory results/outputs chain (from mandatory results/outputs per component to impact), ensuring good coordination among the actors, finalizing the interim reports and discuss the updated work plan. Other details concerning the establishment and functioning of the PSC are described in the Twinning Manual.

7.3 Reports

All reports shall have a narrative section and a financial section. They shall include as a minimum the information detailed in section 5.5.2 (interim reports) and 5.5.3 (final report) of the Twinning Manual. Reports need to go beyond activities and inputs. Two types of report are foreseen in the framework of Twinning: interim quarterly reports and final report. An interim quarterly report shall be presented for discussion at each meeting of the PSC. The narrative part shall primarily take stock of the progress and achievements via-à-vis the mandatory results and provide precise recommendations and corrective measures to be decided by in order to ensure the further progress.

8. Sustainability

The results of a twinning project (from results by component to impacts) must be maintained as a permanent asset in the beneficiary administration even after the end of the implementation of the twinning project. This presupposes, among other things, the establishment by the beneficiary administration of effective mechanisms to disseminate and consolidate the results of the project.

With regard to twinning projects providing support for the development of sectoral policies (strategies and action plans), the development of new legislative acts or the introduction of modifications (especially relating to the *acquis* of the Union), the best way to guarantee the sustainability of mandatory results/products is to ensure that action proposals and legislative proposals are at least supported by basic impact analyzes (regulatory, fiscal) and that that internal and external stakeholders are consulted on them (interministerial and public consultations), as required by the legislation of the beneficiary country. Sufficient time should be allowed for this preparatory work during the project and accelerated procedures for adopting legislation should be avoided, which jeopardize the implementation and enforcement of future legislation.

Given the need to sustain the results, the beneficiary should explain how it has planned the resources necessary for this sustainability in its in their budget planning (medium-term operational planning or similar method).

9. Crosscutting issues (*equal opportunity, environment, climate etc...*)

The issues of equal opportunities, the environment, well-being, ethics and democratic values, as well as money laundering and corruption, the rule of law and the main European principles for the free movement of goods, people and capital, are well addressed and are constant concerns of the various parties involved in this twinning. For example, access to training will be ensured by seeking gender equality.

Equal opportunities:

Gender parity is a reality in higher education in Algeria: women account for 63 % of all tertiary graduates, and unlike most countries, in Algeria 54 % of science, technology, engineering and mathematics degrees are obtained by women (UNESCO World Report 2018), and 40 % of researchers in Algeria are women. The program takes the gender dimension into account in all actions, in particular as regards any difficulties that might hinder the involvement of women (difficulties in reconciling work life).

Risk reduction and Disaster Reduction:

By contributing to the improvement of research and innovation, the Program will indirectly contribute to disaster risk reduction by promoting an environment conducive to the development of scientific and technical knowledge in this field.

Environment:

The Twinning project is fully in line with issues related to sustainable development, climate change and the development of an environmentally friendly and resource-efficient economy for future generations.

To ensure the sustainability of the results, the beneficiary administration will work to institutionalize the cells created under the project and propose to include it in the organization chart of higher education and research institutions.

A sustainability plan will also be proposed, the implementation phases of which will be included in the load plans of each establishment.

10. Conditionality and sequencing

No specific conditionality, specific requirement or staggered, other than those expressly mentioned in the Twinning Fiche, is required.

However, it is important to note that some of the project's activities are interdependent. Indeed, the activities of diagnosis and the preparation of action plans need to be programmed sufficiently in advance of the implementation activities resulting from

them. This programming will make it possible to validate the action plans, including the relevance of the implementation activities.

The Twinning project should contribute to the introduction and sharing of European best practices in policy related to the development of higher education and scientific research.

The proposals submitted by the Member States must include activities to ensure that the results and deliverables listed in the fiche will be carried out.

Activities will be further developed with Twinning partners when drafting the Twinning work plan, bearing in mind that the final list of activities will be decided in cooperation with the Member State.

In addition to the activities linked to the four results and the quarterly meetings of the Steering Committee, it is planned to organize cross-cutting activities aimed at ensuring the visibility of the project (kick-off seminar, mid-term and closing conference, etc.).

11. Indicators for performance measurement

R1: The appropriate governance of the National Research and Innovation System (SNRI) is set up.

- The number of Euro-Algerian cooperation agreements and projects increased by 50 %.

R2: The flow of academic mobility to and from Algeria is increased.

- The flows of academic mobility to and from Algeria are 50 % higher than in the start-up year;
- Academic mobility flows increase by 50 % compared to the start-up year via ERASMUS + MIC projects

R3: Algerian participation in European research and innovation programs (R & I) is increased.

- Algerian participation in European cooperation programs and R & I in environmental research is increased by 25 % compared to the start-up year.
- Doubling of the number of European ERASMUS CBHE projects obtained compared to the start-up year

R4: Euro-Algerian scientific cooperation in the R & I space is boosted

- The transfer of skills and technology from the EU to Algeria is 50 % higher than in the start-up year (number of researchers accompanied by innovation).

12. Facilities available

The beneficiary country will provide RTAs and assistants with a fully equipped office (hardware and software) and offices and meeting rooms for short term experts.

The beneficiary country will cover the costs associated with the implementation of the project

Twining which would not have been mentioned in the indicative budget for Twining.

The Ministry of Higher Education and Scientific Research provides the RTA with offices with a meeting room.

In addition, all training sessions, meetings and other activities will be organized on the various premises of the higher education and research establishments in accordance with the relevant schedule.

ANNEXES

ANNEX I: Level of an intervention logic

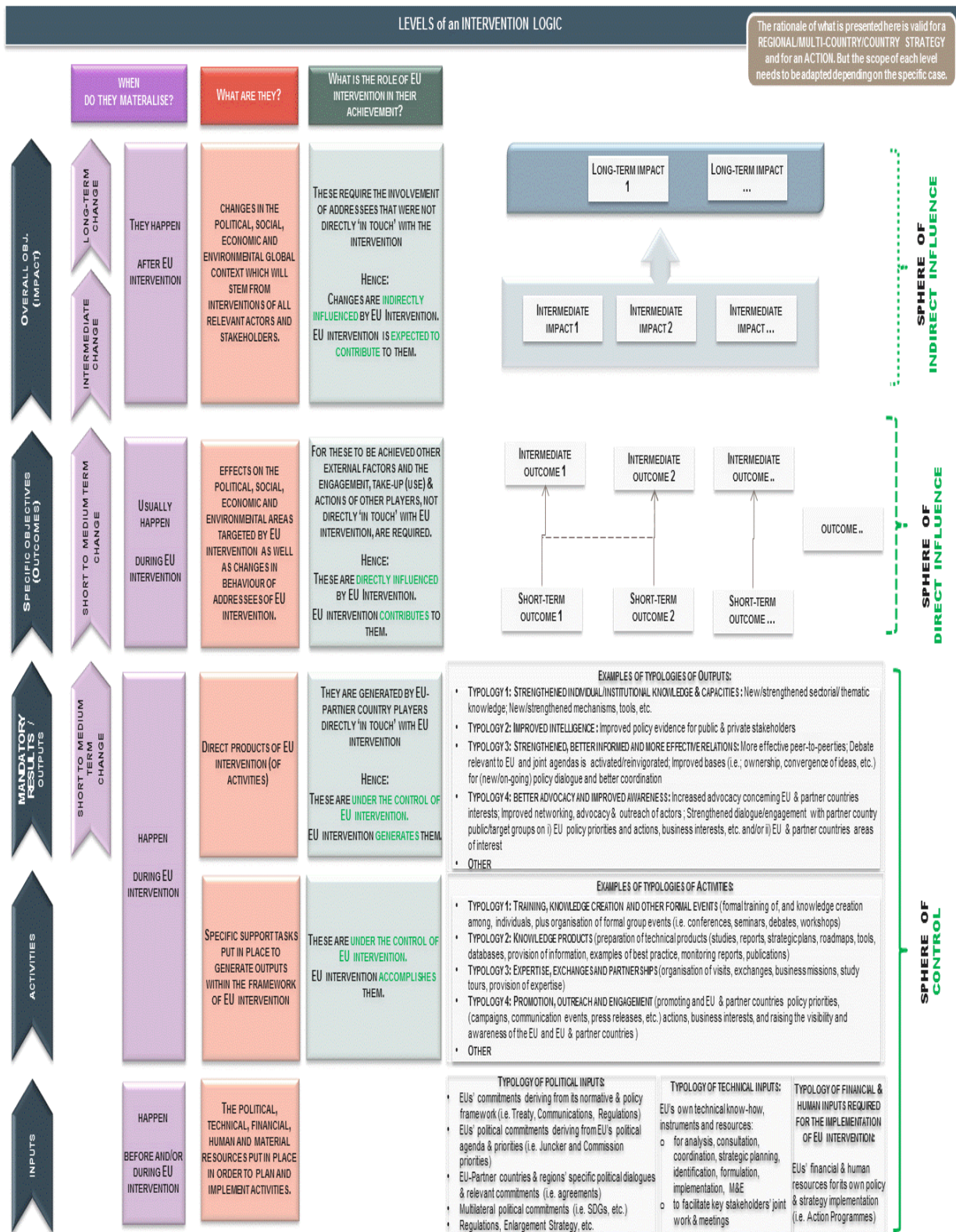
ANNEX II: Simplified Logical Framework

ANNEX III: Estimated schedule

ANNEX IV: MESRS organization chart and main actors

ANNEX V: Institutional and legal framework of the MESRS

Annex C1a: Levels of an intervention logic



ANNEX II: Simplified Logical Framework

Results	Description	Indicators	Sources of verification	Risks	Assumptions (external to project)
General objective	Support the MESRS in the reforms undertaken by integrating the issues of innovation and the engineering of European projects and by promoting Algerian research in the European R & I area.	Evolution of Algeria in international rankings (e.g.: IMI – Global Innovation Index).	<ul style="list-style-type: none"> • Statistics of the European Commission and Executive Agencies • CORDIS database, • Office ERASMUS Algeria, • Directorate for MESRS Cooperation • SDG implementation reports (5, 4 and 13) 	<p>Deadlines for the adoption of institutional changes and sectoral policies</p> <p>Unavailability of MESRS staff</p>	
Specific objectives	(1) the appropriate governance of the National Research and Innovation System (SNRI) allowing the scale of ongoing reforms to	<ul style="list-style-type: none"> • 1-1 the number of Euro-Algerian cooperation agreements and projects is 	<p>Activity report</p> <p>MESRS publications and communications</p> <p>MESRS websites</p>	<p>A database to monitor Algeria's participation in European programs includes data on subsidized projects and trained experts.</p> <p>— The data are:</p>	<ul style="list-style-type: none"> - Leaders and stakeholders are committed to the project. - The process of signatures and validations is under control: it allows compliance with the

	be changed (from the pilot phase to widespread use in all research and innovation institutions) is put in place.	increased by 50 % (Minimal → 50 %)	Twinning project reports	collected quarterly by the MESRS	project schedule and deadlines.
	2) The flow of academic mobility to and from Algeria is increased as a result of the alignment with the international quality standards of Algeria's higher education and its integration into the knowledge economy.	<ul style="list-style-type: none"> • 1-2 academic mobility flows to and from Algeria are 50 % higher than in the start-up year (Minimal → 50 %) • 2-2 academic mobility flows increase by 50 % compared to the start-up year via ERASMUS + MIC projects. (Minimal → 50 %) 	Activity report MESRS publications and communications MESRS websites Twinning project reports	A database to monitor Algeria's participation in programs integrates data on projects by grants and trained experts — The data are: collected quarterly by the MESRS	<ul style="list-style-type: none"> - The NCPs network is strengthened in its tasks. - The European programs which follow on from H2020 & ERASMUS + is open to Algerian participation.
	3) Algerian participation in European research and innovation programs (R & I), with a particular focus on environmental	<ul style="list-style-type: none"> • 1-3 Algerian participation in European cooperation and cooperation programs R & I in environmental 	Activity report MESRS publications and communications MESRS websites	A database to monitor Algeria's participation in programs integrates data on projects by grants and trained experts	<ul style="list-style-type: none"> - The successor program to ERASMUS + finances mobility to develop cooperation international and CBHE. - European partners include Algerian teams in their projects.

	<p>research and climate change is increased</p>	<p>research is increased by 25 % compared to the start-up year. (Minimal → 25 %)</p> <ul style="list-style-type: none"> • 2-3 doubling the number of European ERASMUS CBHE projects obtained compared to the start-up year. (0→2) 	<p>Twinning project reports</p>	<p>— The data are: collected quarterly by the MESRS</p>	
	<p>(4) Euro-Algerian scientific cooperation in the Research and Innovation Area to facilitate the transfer of R & I skills and technology is boosted.</p>	<ul style="list-style-type: none"> • 1-4The transfer of skills and technology from the EU to Algeria is increased by 50 % compared to the start-up year (number of researchers accompanied by innovation). (Minimal → 50 %) 	<p>Activity report MESRS publications and communications MESRS websites Twinning project reports</p>	<p>A database. monitoring of the participation of Algeria in programs Europeans include the data on subsidized projects and trained experts — The data are: collected quarterly by</p>	<ul style="list-style-type: none"> - The socio-economic sector is involved in R & I projects. - Regulatory stimulus measures promote the involvement of researchers in R & I projects

				the MESRS	
<p>Result/output 1</p> <p>Appropriate governance of the national ESRI system is being put in place</p>	<p>1.1 MESRS and EESR have acquired the skills, methods and best practices to implement the three (3) products of the ongoing national R & I reform: the Establishment Project (EP), the Student Staff and Professional Project (PPPE) and the establishment of the Results Axis Management (GAR).</p> <p>1.2 a Cooperation and Research Project Unit made up of approximately 10 people trained in their tasks, and the challenges of the forthcoming calls for projects monitors</p>	<ul style="list-style-type: none"> • 1.1.1 4 to 6 staff of the MESRS (Project Cell) trained • 1.1.2 120 staff from the 30 international project support cells trained in project engineering • 1.2.1 the European Project Support Units are operational in 30 EESR. 	<p>Business reports</p> <p>Thematic studies of the MESRS</p> <p>MESRS publications and communications</p> <p>MESRS websites</p> <p>Twinning project reports</p> <p>— Project report</p>	<p>Deadlines for the adoption of institutional changes and sectoral policies</p> <p>Unavailability of MESRS staff</p>	<ul style="list-style-type: none"> - Endorsement of recommendations - Stability and involvement of MESRS managers and commissions - Implementation recommendations - The arrangements put in place are permanent - Staff trained are stable in their duties

	<p>and evaluates the integration of EESR into the European and international R & I area.</p> <p>1.3 a virtual platform is set up in the MESRS to monitor and evaluate Algeria's participation in European programs and calls for projects.</p> <p>1.4 Some "European Projects" cells are created in the EESR organization chart to encourage the participation of teachers/researchers.</p> <p>1.5 a communication plan for the dissemination of the results of the project makes the results of the project visible.</p>	<ul style="list-style-type: none"> • 1.2.2 a generalization strategy deploys results at national level 			
--	--	---	--	--	--

<p>Result/Outcome 2: The flow of academic mobility to and from Algeria is increased</p>	<p>2.1 quality assurance, international openness and innovation are included in the school project (EP) and the Student Staff and Professional Project (PPPE), which will then be integrated into the innovative training offer.</p> <p>2.2 three innovative joint Masters courses are being launched in three pilot sites, with European partnerships in 3 priority themes (AI (BigData and robotic mechatronics), e-governance and local development, and geomatic applied to urban studies).</p>	<ul style="list-style-type: none"> • 2.1.1 The pedagogical leaders of 12 EESR have the skills to set up joint Master's degrees with European partners and to develop existing curricula. 	<ul style="list-style-type: none"> • MESRS publications and communications • MESRS websites • Twinning project reports • ERASMUS + report 	<p>Deadlines for the adoption of institutional changes and sectoral policies</p> <p>Unavailability of MESRS staff</p>	<ul style="list-style-type: none"> - Endorsement of recommendations - Stability and involvement of MESRS managers and commissions - Implementation recommendations - The arrangements put in place are permanent - Staff Trained are stable in their functions
--	---	---	---	---	---

	<p>2.3 schemes facilitating the development of innovation culture are implemented in at least one (1) pilot-lab (Engineering School), and a Capacity building project (CBHE-ERASMUS +) on innovation issues involves at least 12 EESR.</p>				
<p>Result/Outcome 3: increased participation in European research and innovation programmes</p>	<p>3.1 the network of NCPs (40 National Contact Points) is consolidated, trained and equipped with the necessary means for its tasks; it is operational for Horizon Europe.</p> <p>3.2 a Horizon Europe-Algeria platform (following the Algeria H2020 platform) is</p>	<ul style="list-style-type: none"> • 3.1.1 number of joint Masters (0 →1) • 3.1.2The network of 40 NCPs is operational. • 3.2.1Start of the number of EESR participants in European 	<ul style="list-style-type: none"> • MESRS publications and communications • MESRS websites • Twinning project reports • ERASMUS + report 	<p>Deadlines for the adoption of institutional changes and sectoral policies</p> <p>Unavailability of MESRS staff</p>	<ul style="list-style-type: none"> - Endorsement of recommendations - Stability and involvement of MESRS managers and commissions - Implementation recommendations - The arrangements put in place are permanent - Staff trained are stable in their functions.

	<p>operational, with the relevant content to accompany researchers.</p> <p>3.3 EESR have the know-how to submit projects contributing notably to climate change adaptation and access different EU funding (Erasmus +, H2020, Horizon Europe, PRIMA, COST).</p> <p>3.4 the Legal, Human and Social Sciences (SHS) and Law of Political Sciences (DSP) sector is fully integrated and able to access European research programs and their societal challenges.</p> <p>3.5 Algerian research is integrated into</p>	<p>projects (Horizon Europe & PRIMA) in the ERASMUS + program. (0 →2)</p> <ul style="list-style-type: none"> • 3.3.1 Double number of European ERASMUS CBHE projects obtained. (0 →2) • 3.3.2A CBHE-ERASMUS + project on innovation, in a Euro-Algerian partnership, involves at least 12 EESR. (0 →1) • 3.4.1 number of SHS and DSP 			
--	--	---	--	--	--

	international and European research networks; research teams participate in consortia for R & I projects, including through the mobilization of the scientific diaspora.	departments among successful candidates (0 →1)			
Result/Outcome 4: Euro-Algerian cooperation in the European and international R & I area is boosted	<p>4.1 Algerian EESR are integrated into 12 international research consortia and/or networks and participate in 12 European R & I projects.</p> <p>4.2 technicians and engineers from 2 microelectronics and biotechnology research platforms are trained in platform optimization.</p> <p>4.3 production of lakes is moving towards innovation in relation to the</p>	<ul style="list-style-type: none"> • 4.1.1 Innovative schemes and projects facilitating technology transfer and innovation shall be implemented in at least 3 pilot sites (at least 3) • 4.1.2 The EESR WEB sites make R & I visible internationally, the reporting of publications is 60 % harmonised 	<p>MESRS publications and communications</p> <p>MESRS websites</p> <p>Twinning project reports</p> <p>ERASMUS + report</p> <p>The database trained experts integrates data from EESR, and project steering.</p> <p>They are collected quarterly by</p>	<p>Deadlines for the adoption of institutional changes and sectoral policies</p> <p>Unavailability of MESRS staff</p>	<ul style="list-style-type: none"> - The arrangements put in place are permanent - Trained staff are stable in their duties. - Regulatory budgetary and accounting developments allow participation from EESR to European projects Endorsement of recommendations - Stability and involvement of MESRS managers and commissions Implementation recommendations

	<p>Technology Readiness Level (TRL)</p> <p>4.4 the technical support staff of the innovation centres in Bejaia, Tlemcen, Biskra are upgraded to develop synergies between the socio-economic sector and the EESR.</p>	<p>in international databases.</p> <p>(0 →60 %)</p>	<p>the MESRS</p>		<p>The devices put in place in place are permanent</p> <p>- Staff trained are stable in their duties.</p>
--	--	---	------------------	--	---

ANNEX III: ESTIMATED SCHEDULE (example)

Estimated IPTICAR Twinning Calendar	Year 1								Year 2							
	Quar ter 1		Quar ter 2		Quar ter 3		Quar ter 4		Quar ter 5		Quar ter 6		Quar ter 7		Quar ter 8	
RTAs																
RTA and Twinning start date																
RTAs assistants selection																
Horizontal activities																
Preparation of Initial work plan																
Steering committees																
Visibility and communication																
Kick-off meeting																
mid-term conference																
Closing conference																
Mandatory results/outputs																

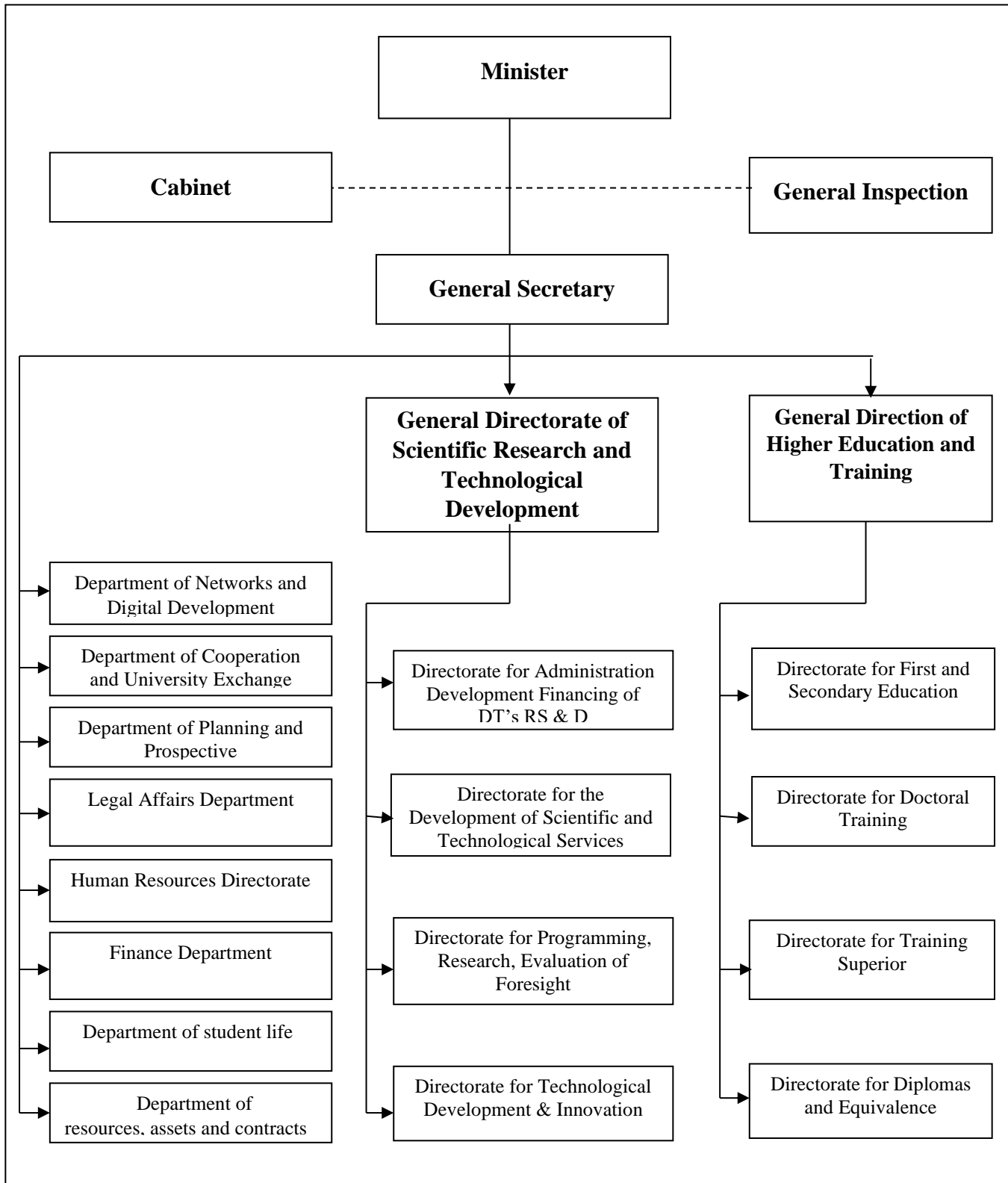
<p>Component 1 The appropriate governance of the national ESRI system is put in place</p>																												
<p>Component 2 the flow of academic mobility to and from Algeria is increased</p>																												
<p>Component 3 Increased participation in European research and innovation programs</p>																												
<p>Component 4 Algerian cooperation in the European and international R & I area is boosted</p>																												

ANNEX IV: Organization chart of the Ministry of Higher Education and Scientific Research

Under the authority of the Minister, the central administration of the Ministry of Higher Education and Scientific Research comprises:

- The General Secretary;
- The Cabinet of the Minister;
- The General Inspection;
- The following structures:
 - ✓ The General Direction of Higher Education and Training;
 - ✓ The General Directorate of Scientific Research and Technological Development;
 - ✓ The Human Resources Directorate;
 - ✓ Finance Department;
 - ✓ Department of resources, assets and contracts;
 - ✓ The Department of student life;
 - ✓ The Department of Cooperation and University Exchange;
 - ✓ The Department of Networks and Digital Development;
 - ✓ The Department of Planning and Prospective ;
 - ✓ Legal Affairs Department.

Figure1: Organization chart of the Ministry



Annex V The institutional and legal framework

- Law No 08-06 of 16 Safar 1429 corresponding to 23 February 2008 amending and supplementing Law No 99-05 of 18 Dhou El Hidja 1419 corresponding to 4 April 1999 on the Higher Education Guidance Law.
- Law No 15-21 of 18 Rabie El Aouel 1437 corresponding to 30 December 2015 on the Guidance Law on Scientific Research and Technological Development.
- Law No 20-02 of 5 Chaâbane 1441 corresponding to 30 March 2020 amending Law No 15-21 of 18 Rabie El Aouel 1437 corresponding to 30 December 2015 adopting the Guidance Law on Scientific Research and Technological Development.
- Law No 20-01 of 5 Chaâbane 1441 corresponding to 30 March 2020 laying down the tasks, composition and organisation of the National Council for Scientific Research and Technology.
- Presidential Decree No 05-159 of 18 Rabie El Aouel 1426 corresponding to 27 April 2005 ratifying the Euro-Mediterranean Agreement establishing an association between the People's Democratic Republic of Algeria, of the one part, and the European Community and its Member States, of the other part, signed in Valencia on 22 April 2002.
- Presidential Decree No 13-121 of 22 Joumada El oula 1434 corresponding to 3 April 2013 ratifying the Agreement between the People's Democratic Republic of Algeria and the European Union on scientific and technological cooperation, signed in Algiers on 19 March 2012.
- Executive Decree No 21-134 of 24 Chaâbane 1442 corresponding to 7 April 2021 on the organisation of the central administration of the Ministry of Higher Education and Scientific Research.
- The Sector Reform Strategy for Governance Renovation for More Performance and Transparency, as reflected in the Government Action Plan 2020-2024: [plan-d-action-du-Gouvernement-2021-en.pdf](#)