



## **Action A3**

### **INITIAL SEMINAR**

***Technology transfer and intellectual  
property capacity management***

***Gonzalo León (Spain)***

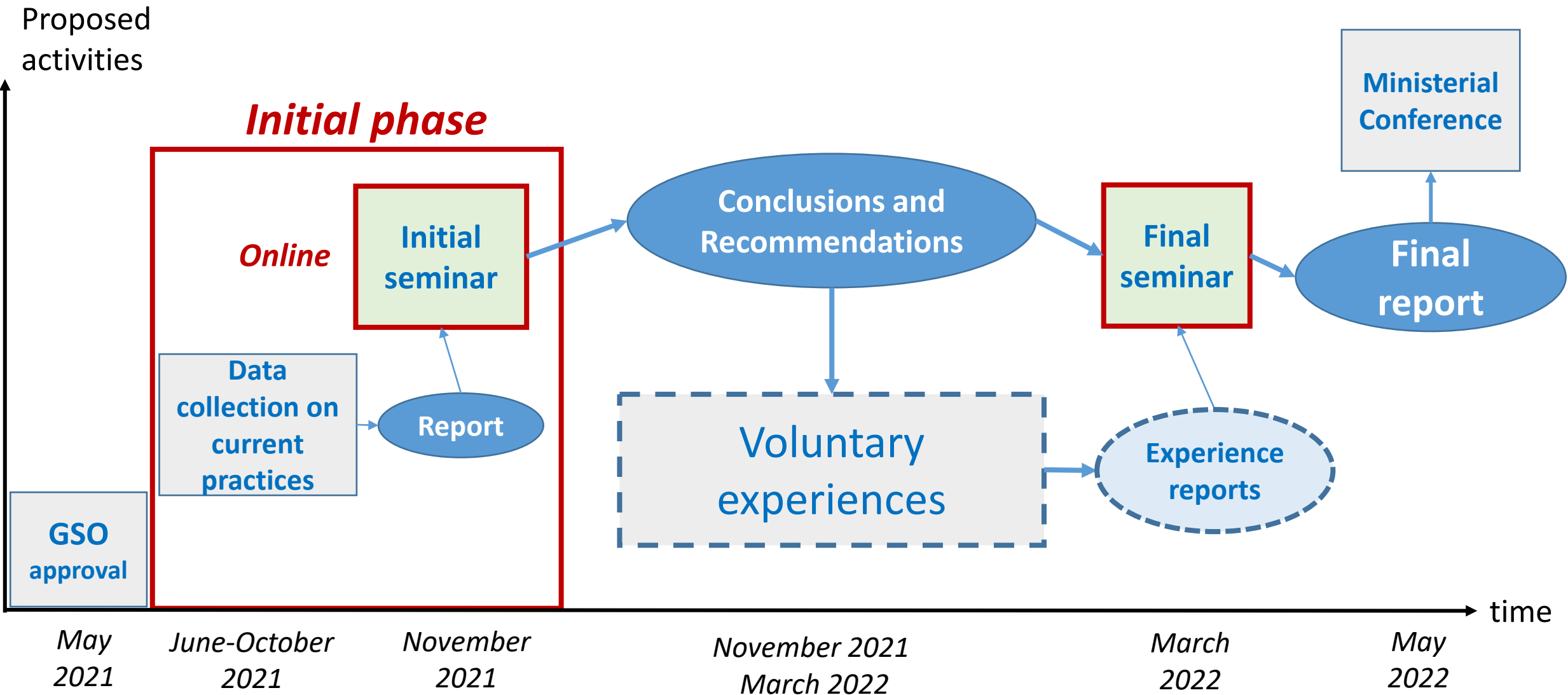
***Rim Saied (Tunisia)***

**Initial Seminar for Action A3 November 2021**

# Context of Action A3

- The improvement of **capacities for technology transfer and intellectual property** was considered as one of the best instruments to increase the valorisation of research efforts
- **Action A3** was included in the Work Programme 2020-2021 of the Dialogue 5+5 to analyse technology transfer and intellectual property management capacity in the region
  - ✓ Tunisia and Spain assumed the co-leadership
- Information for this report was collected from a **survey** based on a **questionnaire** prepared and sent to all delegations

# Planning of A3



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# Objectives of the Seminar on A3

- to ***present and discuss*** the data processed from the answers received to the survey on A3
- to ***learn*** from best practices in participating countries
- to ***complete*** the preliminary report with further insights
- to ***extract recommendations for future work*** for the next Dialogue 5+5 Ministerial Conference in Mauritania 2022

# Initial Survey

## Type of information requested:

- ✓ **On the legislative framework**
  - At what extent TT and IP is part of the governmental legal framework
- ✓ **On the institutional regulatory framework**
  - What are the internal regulations of universities to deal with?
- ✓ **On the support to TT and IP management**
  - Main features of the existing support programmes for IP and TT
  - Incentives
- ✓ **On the future evolution**
  - Cooperation at international level

# Presentation of the results



- This **preliminary version of the report** has included data provided by the delegations of Algeria, Libya, Mauritania, Morocco, Tunisia, France, Italy, Malta, and Spain.
- The **structure of the report** follows the ordered questions included in the survey prepared for this Action A3.
  - ✓ After each question, the document also includes all comments received.
  - ✓ This presentation has extracted some relevant issues
- The report presents some **conclusions and suggestions** for future work
  - ✓ To be discussed and finalised during the Seminar
- After the seminar, a **refined version** will be prepared
  - ✓ To be presented in the GSO meeting 2-3 December 2021

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# Conclusions of the Survey (I)



Formally, all countries participating in this survey have specific governmental legislations and regulations that support technology transfer and protection of research results as a national objective.

Algeria MESRS	Libya TRIP	Mauritania	Morocco	Tunisia	France	Italy	Malta	Spain
YES	YES	YES	YES	YES	YES	YES	YES	YES

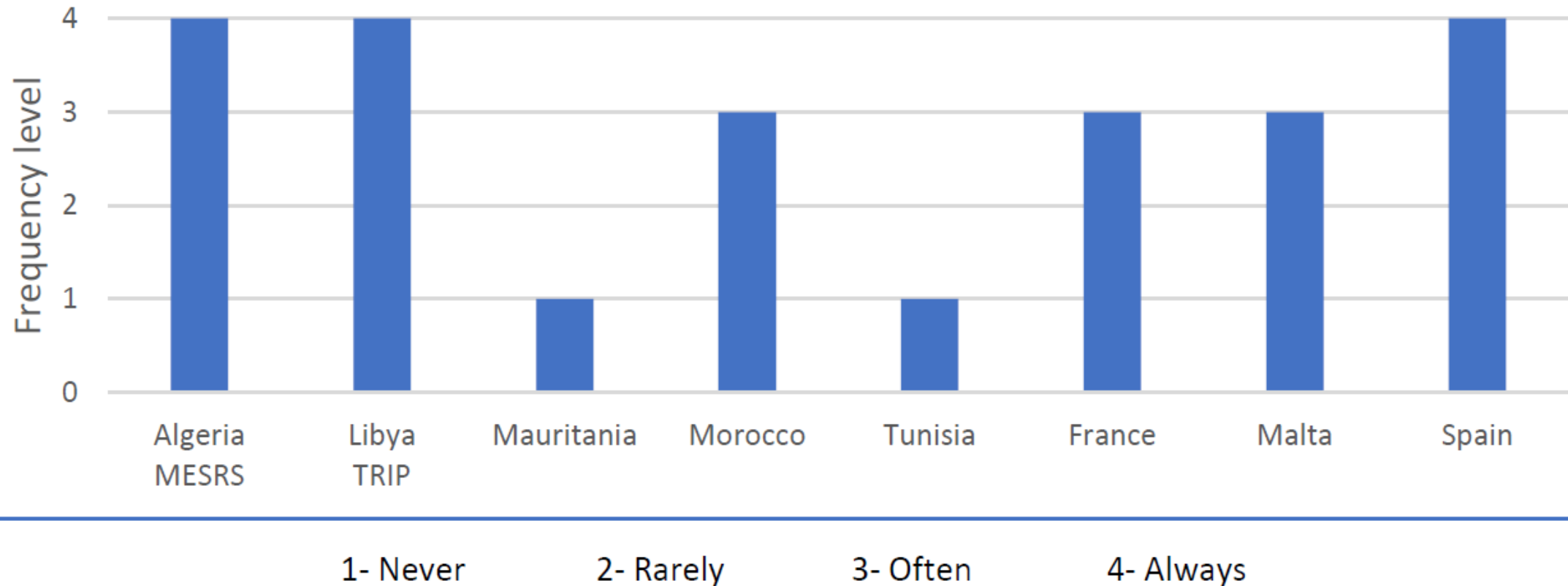
- In all cases, responsibilities are distributed in two or more ministerial departments focused on the specificities of different type of actors (i.e., public, or private)
- The exploitation of research results is considered as a (social) goal in the science, innovation, and higher education legislation in all countries, except Mauritania and Tunisia which did not mention it.

**Suggestion for future work in Dialogue 5+5:** Collect data on a regular basis on the evolution of legislations and programmes in the region to be able to propose specific actions for the future and to discuss lessons learned.

# Conclusions of the Survey (II)



Q.1.2. The exploitation of research results is mentioned or defined as a (social) objective in legislation on science, innovation and higher education



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# Conclusions of the Survey (III)

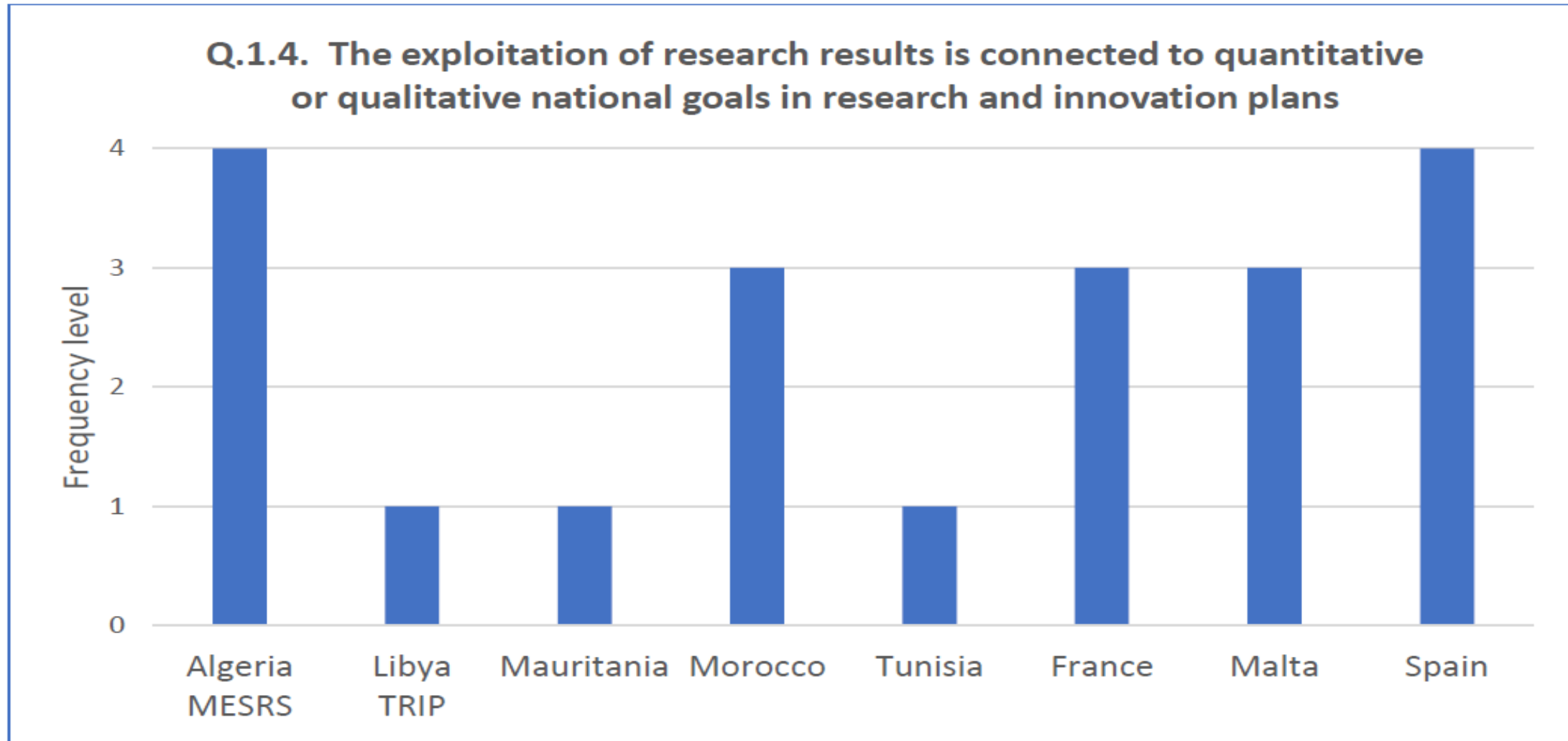


The training of university students on TT and IP issues is included in university degrees although the level and intensity is heterogeneous.

- a. Highly rated by Algeria, Libya, Morocco, Tunisia and Spain.
  - i. Algeria and Libya mentioned the need of training on IP for all university degrees while other countries emphasises this need on STEM students.
- b. The support of the definition of national initiatives on TT and IP seems very relevant to reinforce training at university level.

**Suggestion for future work in Dialogue 5+5:** To obtain detailed information on the university degrees where training programmes on TT and IP are included, the type of courses (mandatory or optional) and the ECTS allocated to generate a map of the subjects covered and intensity. It could be the basis for international cooperation in a later stage (maybe in connection to common learning modules).

# Conclusions of the Survey (III)



1- Never

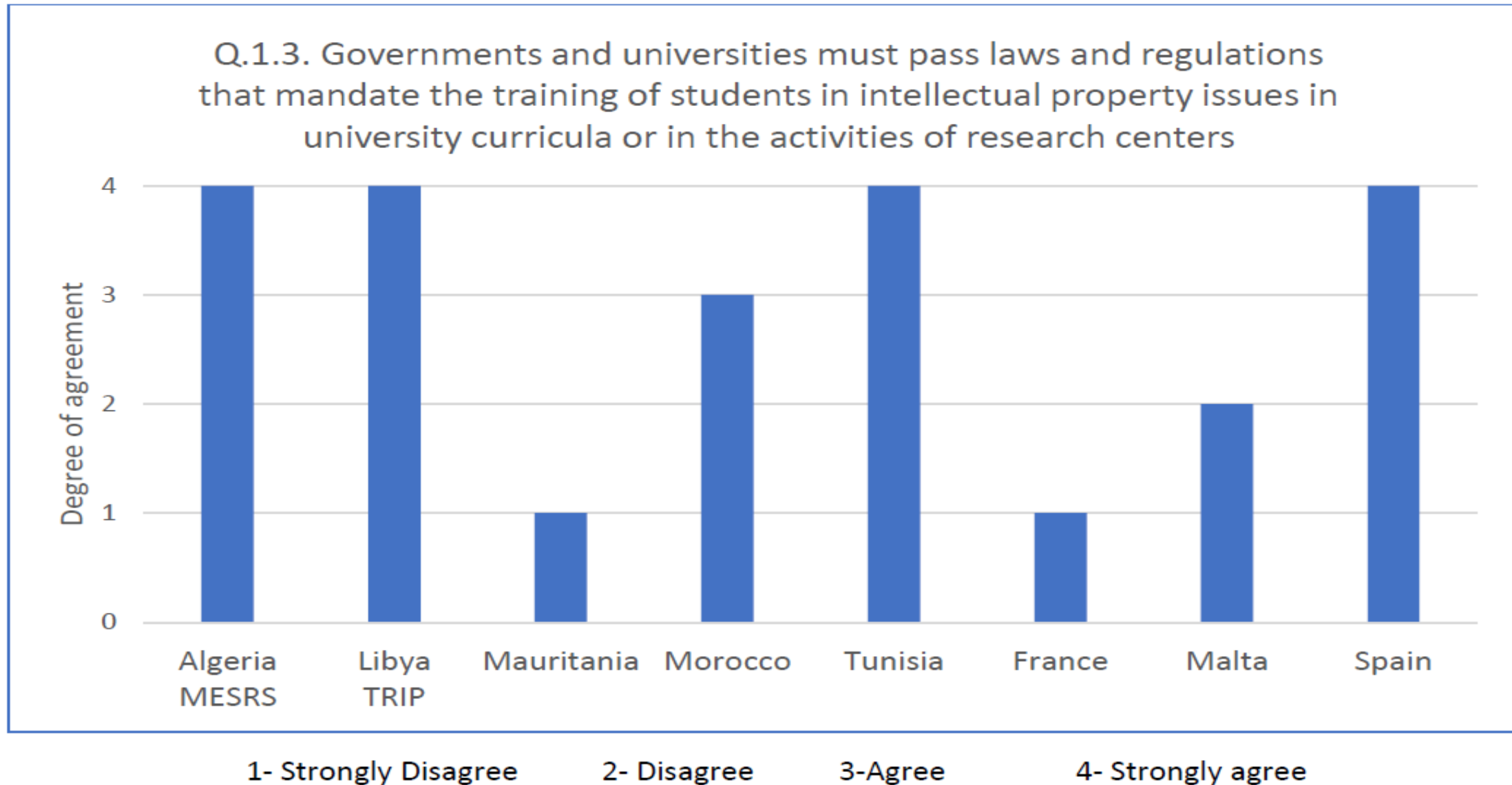
2- Rarely

3- Often

4- Always

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# Conclusions of the Survey (III)



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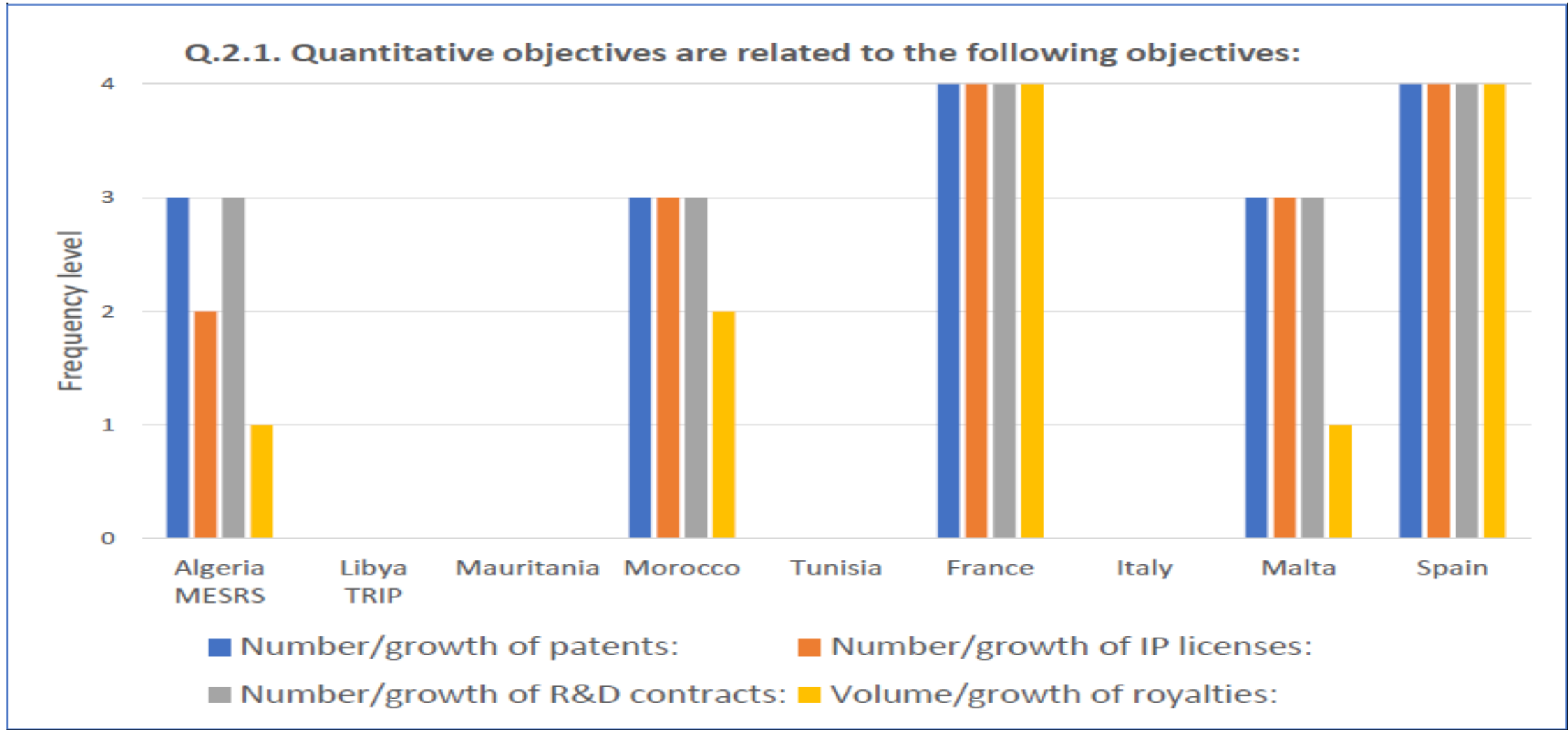
# Conclusions of the Survey (III)

**Governments have defined objectives to support the protection of IP and the exploitation of research results at the institutional level.**

- a. Balance between objectives at individual level for individual researchers and faculty members and at the institutional level to mobilise universities and research centres.
  - i. Undergraduate students seem not to be relevant for most countries.
- b. Many governments have defined quantitative targets focused on number/growth of patents, licenses, R&D contracts (less on royalties).
  - i. It is not clear how targets are used (e.g., for funding or ranking universities or research centres)
- c. The objectives of this effort are the improvement in the employability of researchers, the creation of start-ups and the competitiveness of institutions.

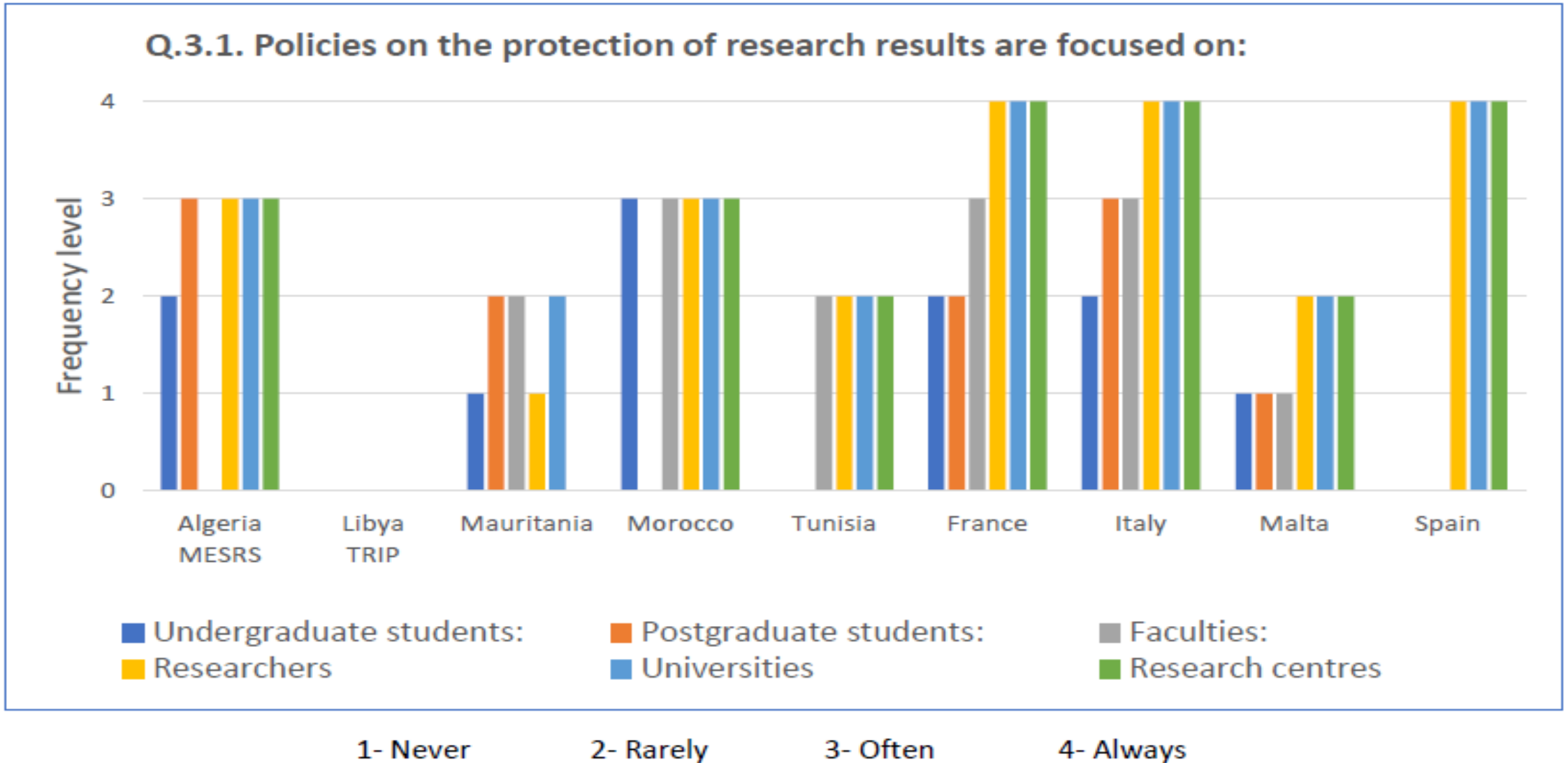
**Suggestion for future work in Dialogue 5+5:** Complete this information with some data about the quantitative targets and their relevance for institutions and individuals.

# Conclusions of the Survey (III)

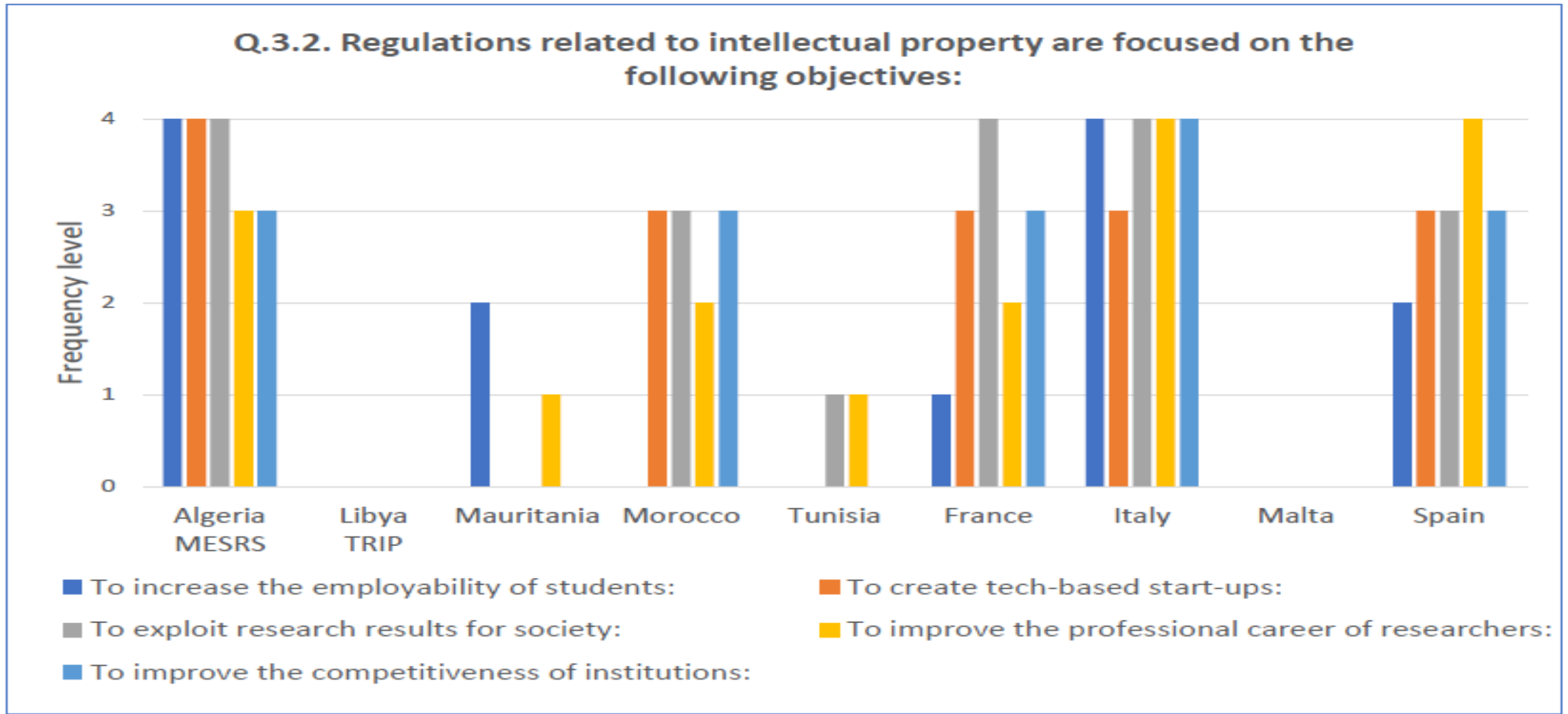


1- Never      2- Rarely      3- Often      4- Always

# Conclusions of the Survey (III)



# Conclusions of the Survey (III)



1- Never

2- Rarely

3- Often

4- Always



# Conclusions of the Survey (IV)

All countries, except Italy and Malta, indicate that they have ministerial or specific governmental agencies or ministerial units related to the promotion and protection of intellectual property in the public system.

a. It is a sign of the governmental interest.

Algeria MESRS	Libya TRIP	Mauritania	Morocco	Tunisia	France	Italy	Malta	Spain
YES	YES	YES	YES	YES	YES	NO	NO	YES

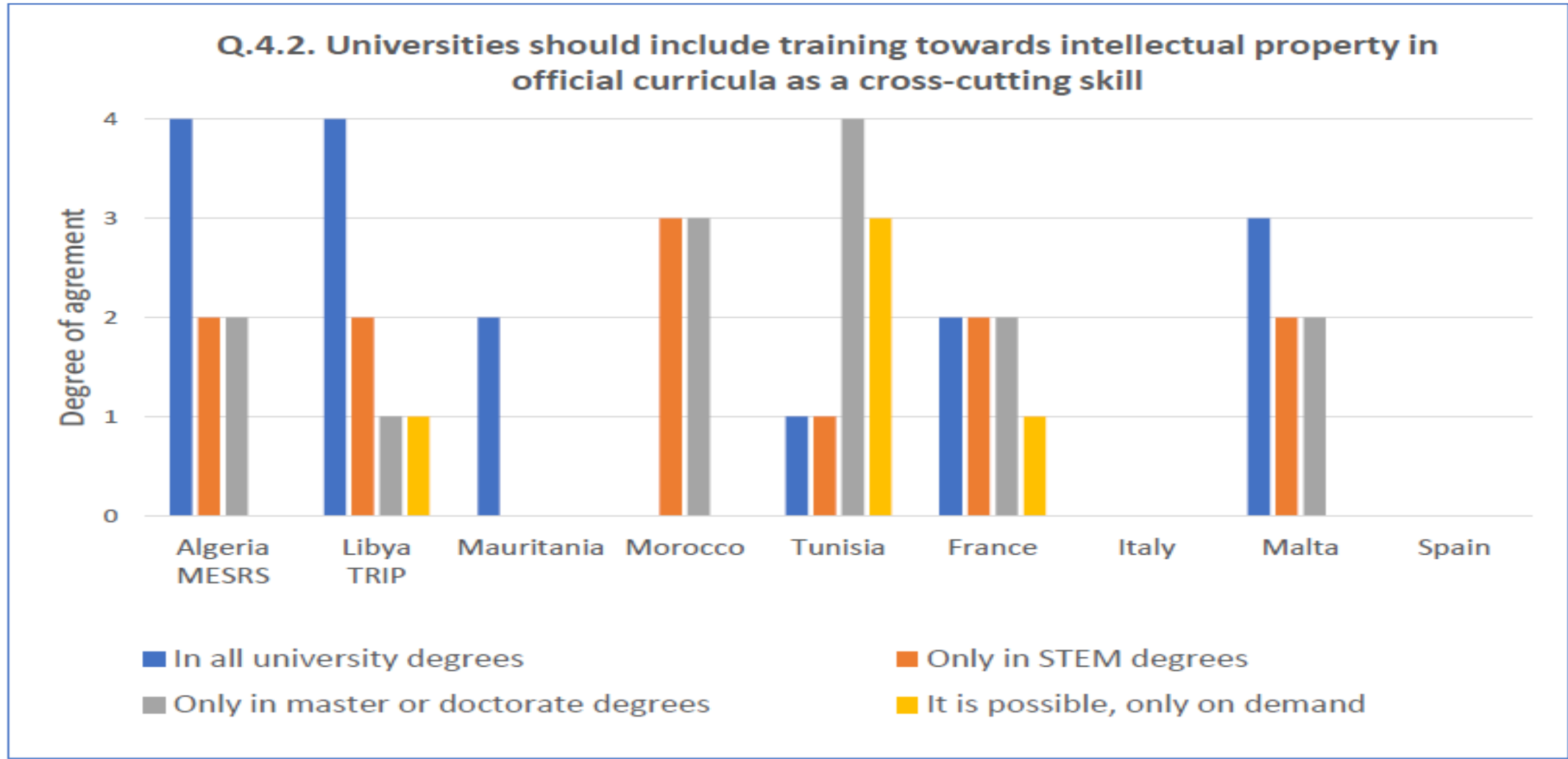
b. The relation with national patent offices is weak.

- i. Cooperation of universities with national patent offices is not clear
- ii. No mention to cooperation at international level (e.g., WIPO, EPO).

**Suggestion for future work in Dialogue 5+5:** To promote cooperation programmes with WIPO and EPO for training and improvement of national legislation in Dialogue 5+5 countries.



# Conclusions of the Survey (IV)



1- Strongly Disagree

2- Disagree

3- Agree

4- Strongly agree

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# Conclusions of the Survey (V)



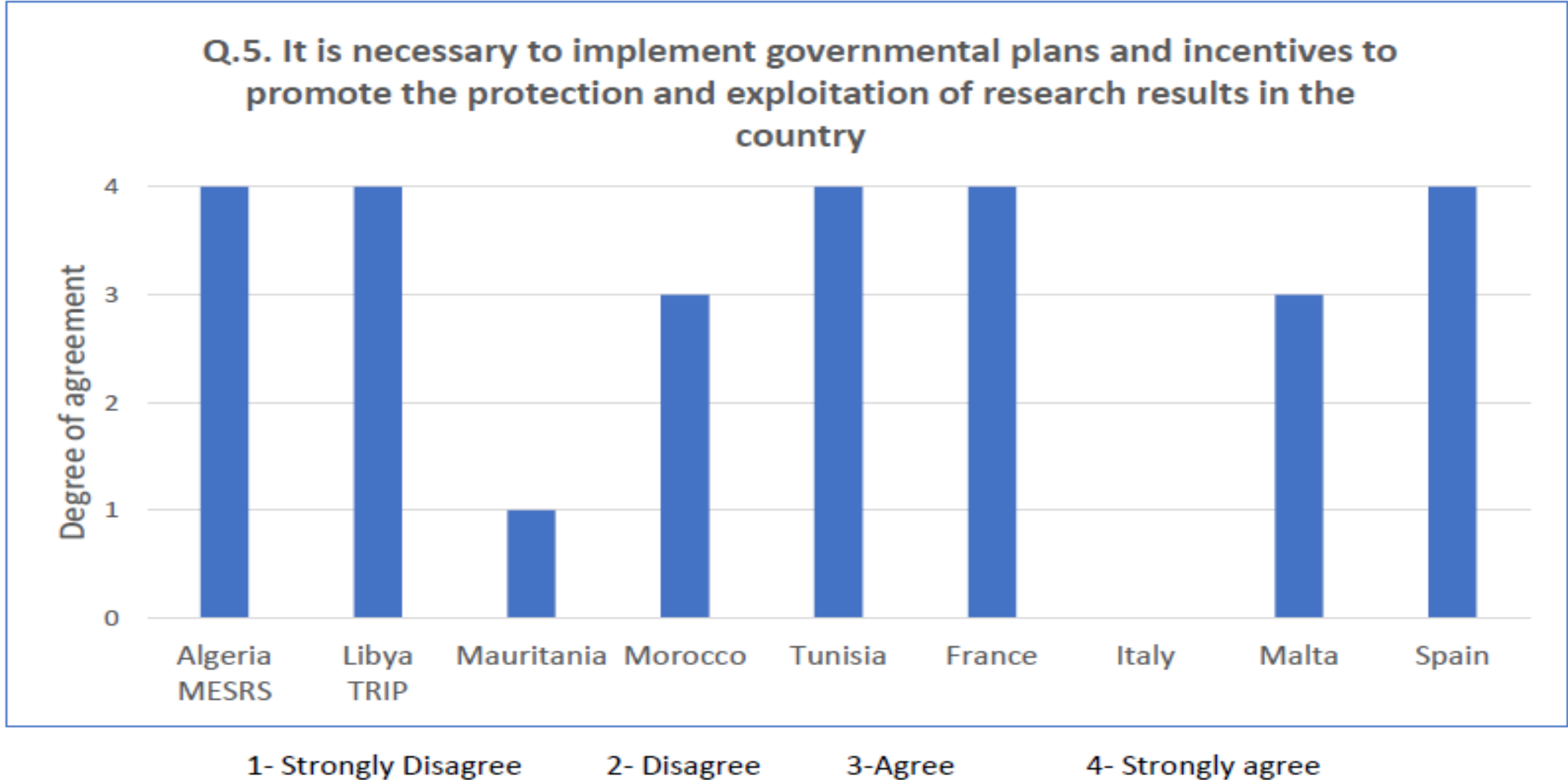
## Incentives for increasing the protection and exploitation of research results developed by universities and research centres are common

- a. Incentives are set at the institutional level but not focused on R&I projects
  - i. competitive funding based on performance, lower costs and training
  - ii. waiving of patents for public centres in Morocco and France
- b. Algeria, Tunisia and France mentioned the need to support IP in all types of projects (in other countries for applied research and innovation)
- c. Low use of open calls to create institutional structures to support TT and IP.
- d. Explicit calls for proof of concept and additional funding in funded projects.

**Suggestion for future work in Dialogue 5+5:** The analysis of incentives and pros and cons of different measures for improving TT and IP should require further debate. The experience of the EU framework programmes could be useful.

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# Conclusions of the Survey (V)



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# Conclusions of the Survey (VI)



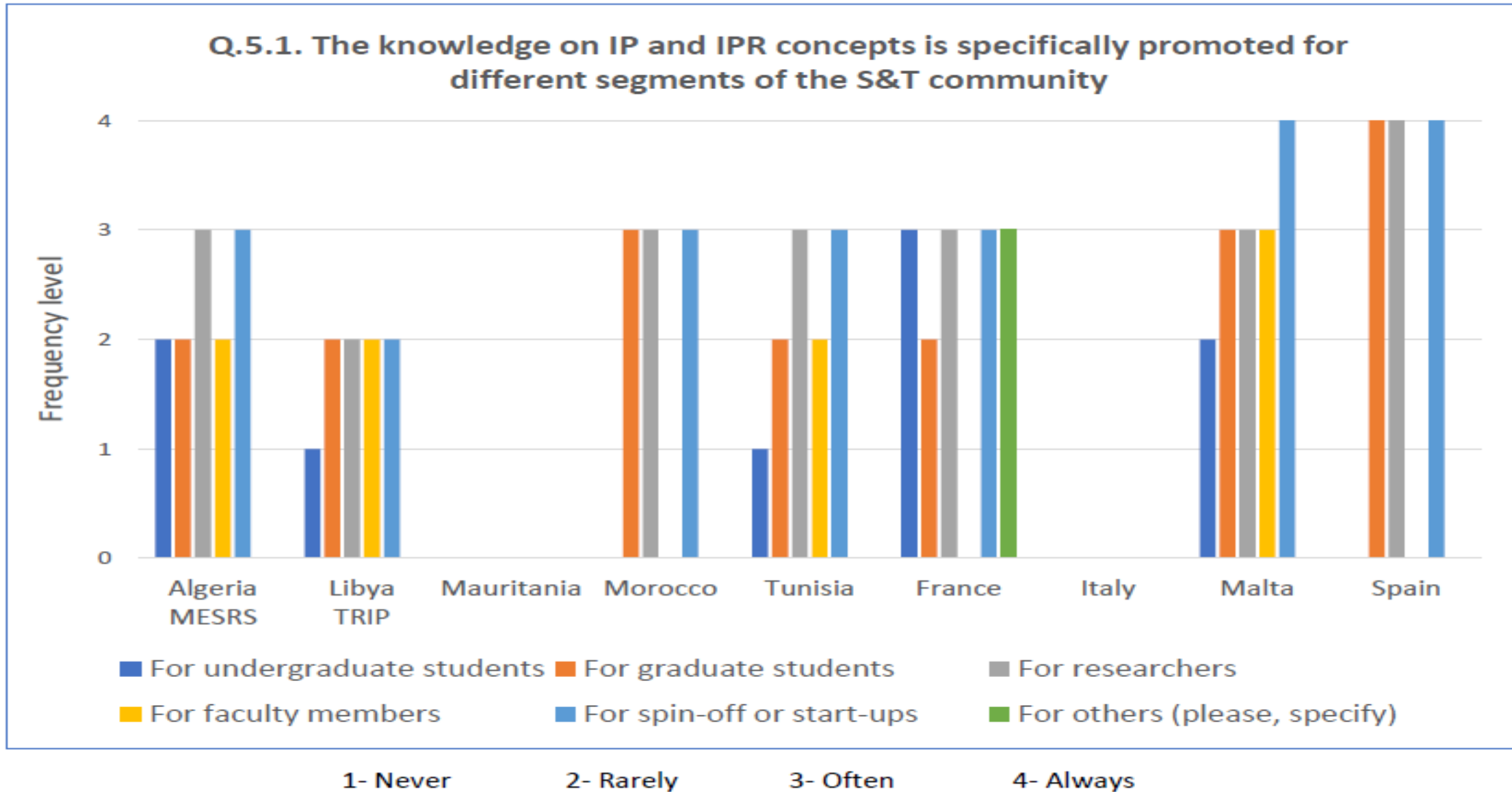
## Experience in managing and exploiting the IP in universities and research centres

- a. Units to support the management of IP reflects a clear difference between the North (except Malta) and the South of the Mediterranean countries.
  - i. TTOs offer a large set of services,
- b. The existence of thematic TTOs (except in France) is not common and the cooperation with other specialised TTOs in other entities very low.
  - i. The lack of specialised personnel will be a barrier to stimulate IP And TT.
- c. The number of patents is not very high (higher in the EU), no data of licenses
  - i. Lack of resources and support and no relevance for the professional career

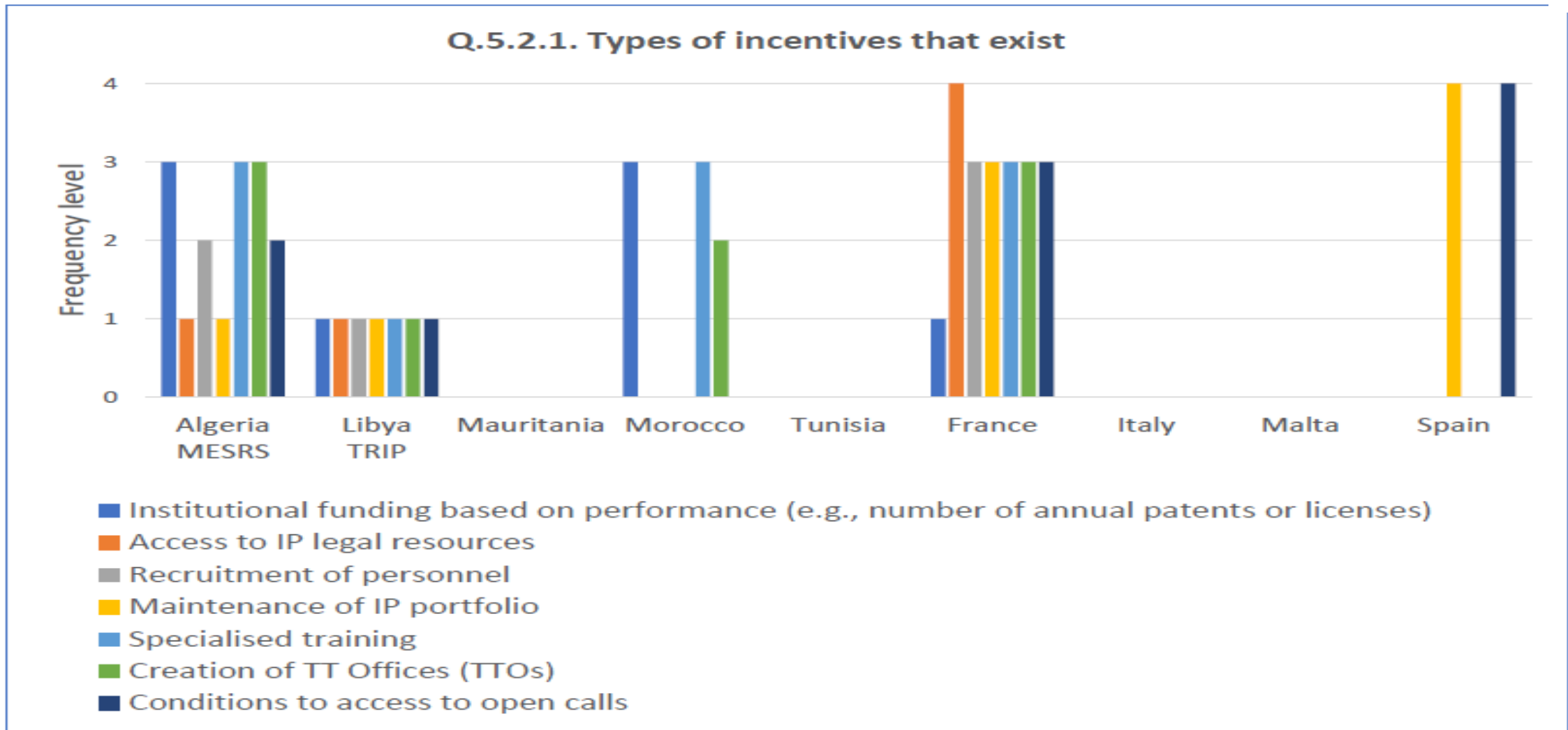
**Suggestion for future work in Dialogue 5+5:** Initiate the creation of a network of TTOs in universities and research centres in the region to share experiences and, if possible, to cooperate in specific initiatives.

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# Conclusions of the Survey (VI)



# Conclusions of the Survey (VI)

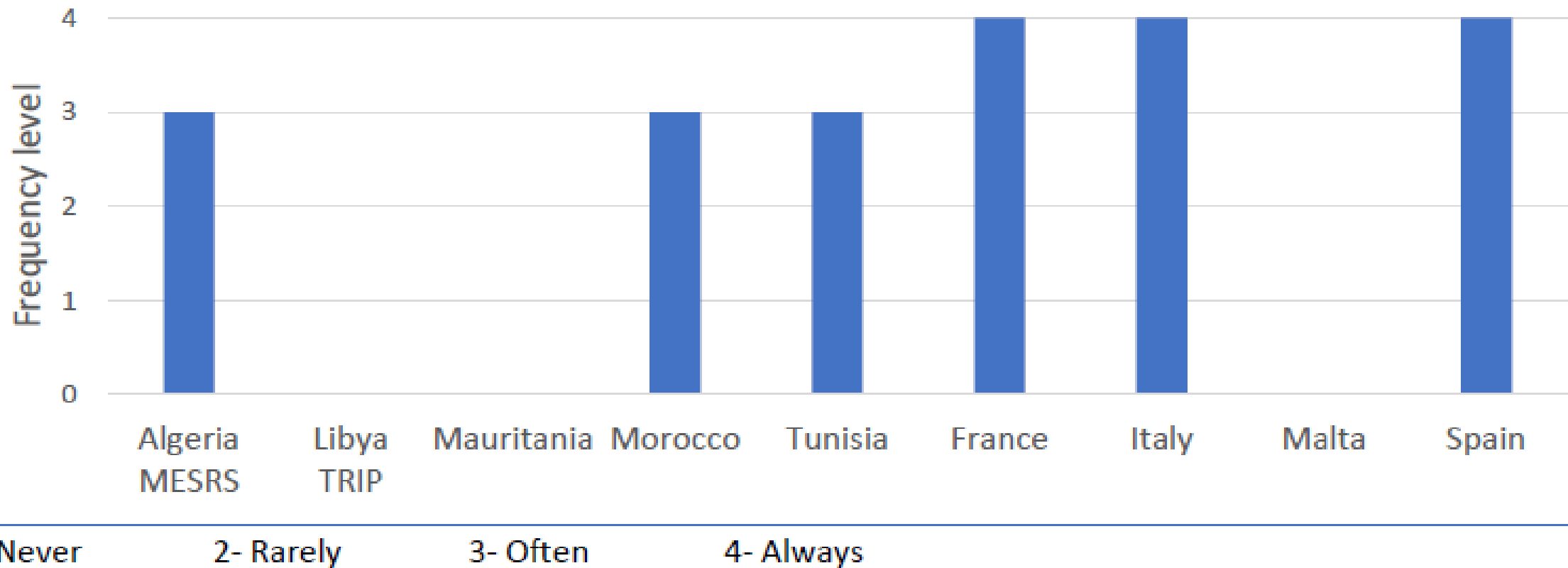


1- Never      2- Rarely      3- Often      4- Always

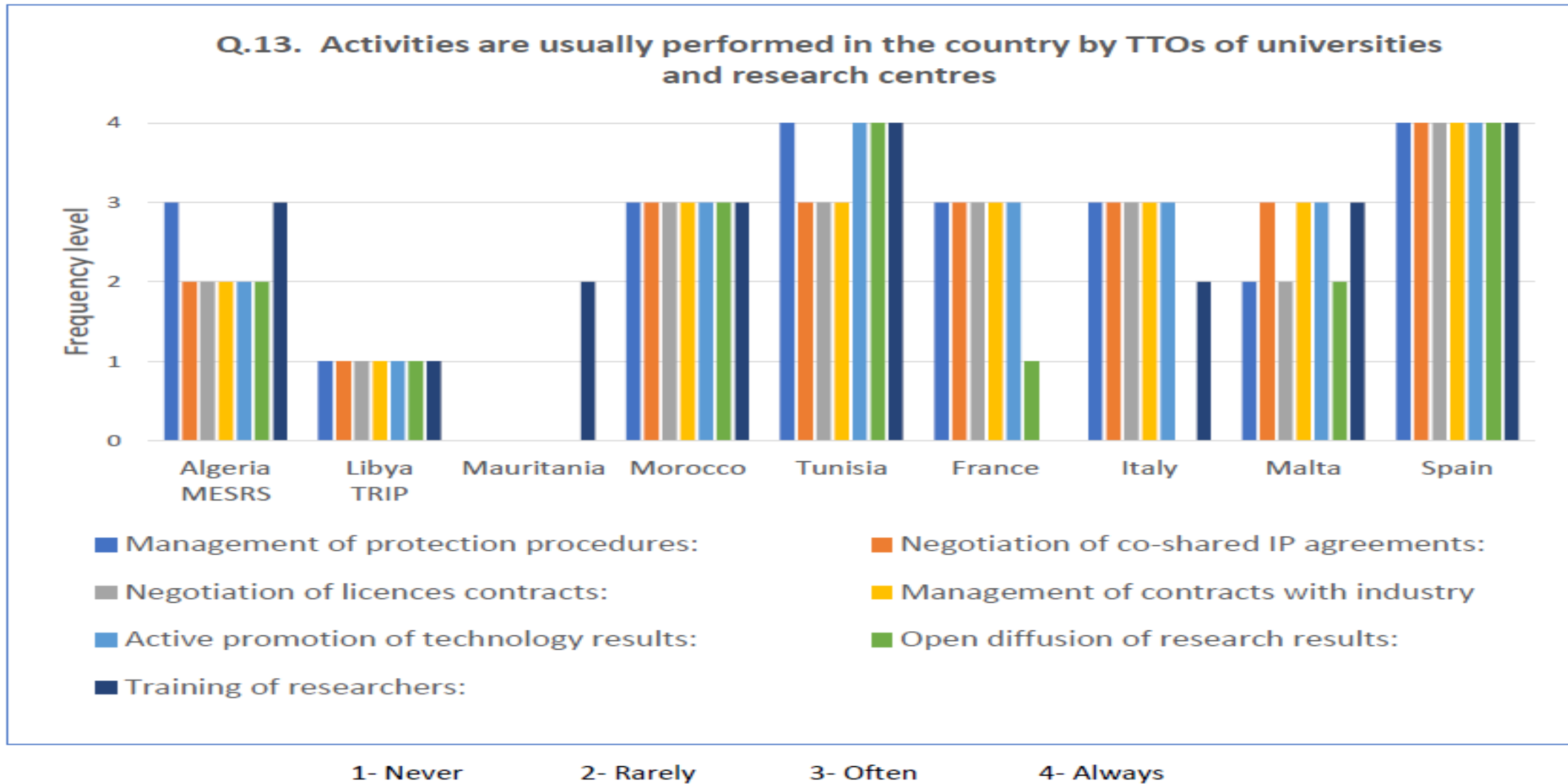
# Conclusions of the Survey (VII)



Q.9.1. Universities and research centres have “technology transfer units” to help researchers in the exploitation of research results



# Conclusions of the Survey (VII)





# Conclusions of the Survey (VII)



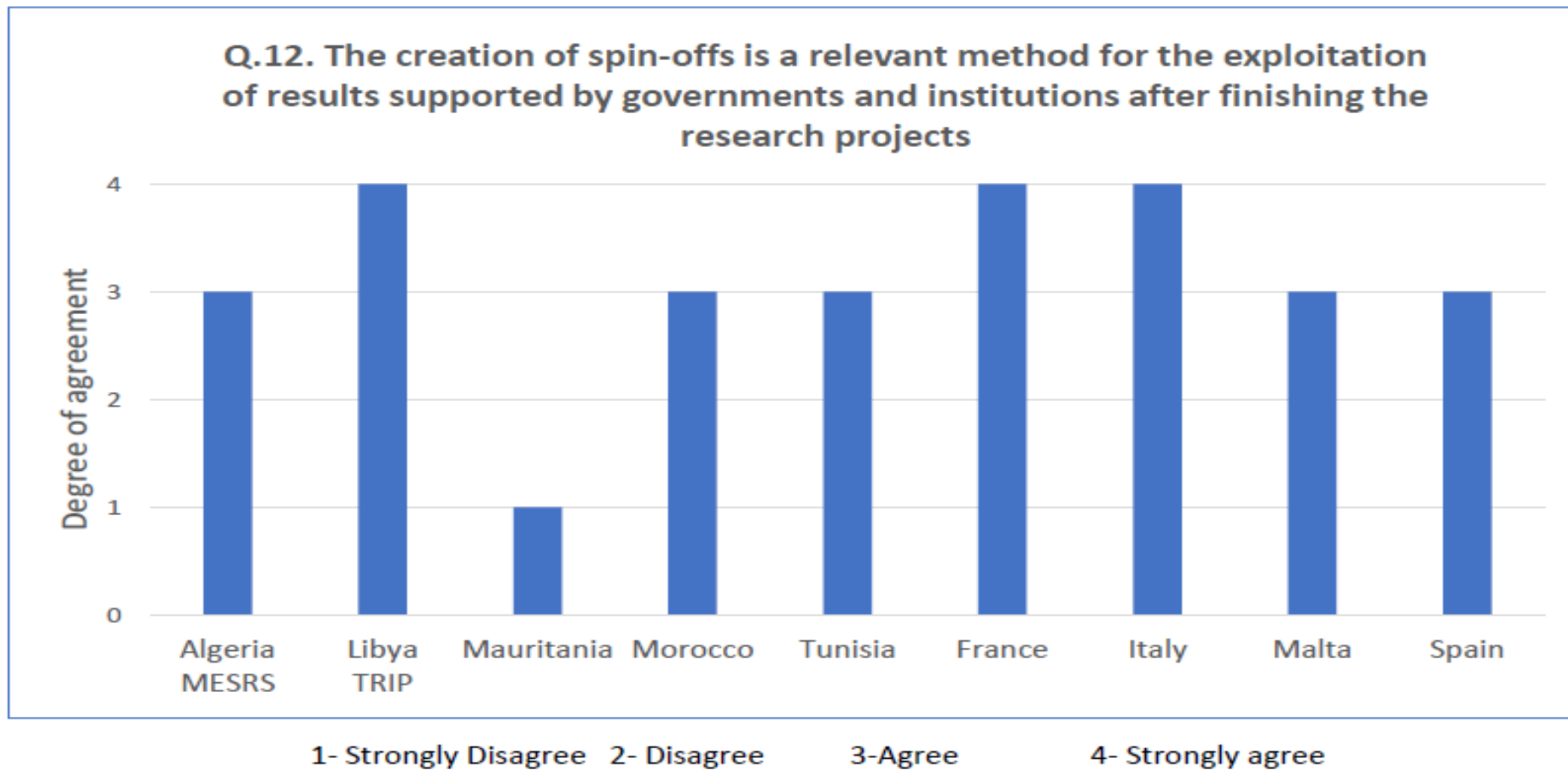
## The value of the creation of spin-offs for exploiting research results is widely recognised in all countries

- a. The motivation of researchers to launch spin-offs is growing
  - i. Relevant approach to exploit the results of research projects.
  - ii. Agreement to access human and material resources.
- b. Many universities have created business incubators to locate spin-offs.
  - i. The type of services they receive from business incubators is not clear
- c. Countries have considered the need to connect spin-offs with scholarship programmes to train students

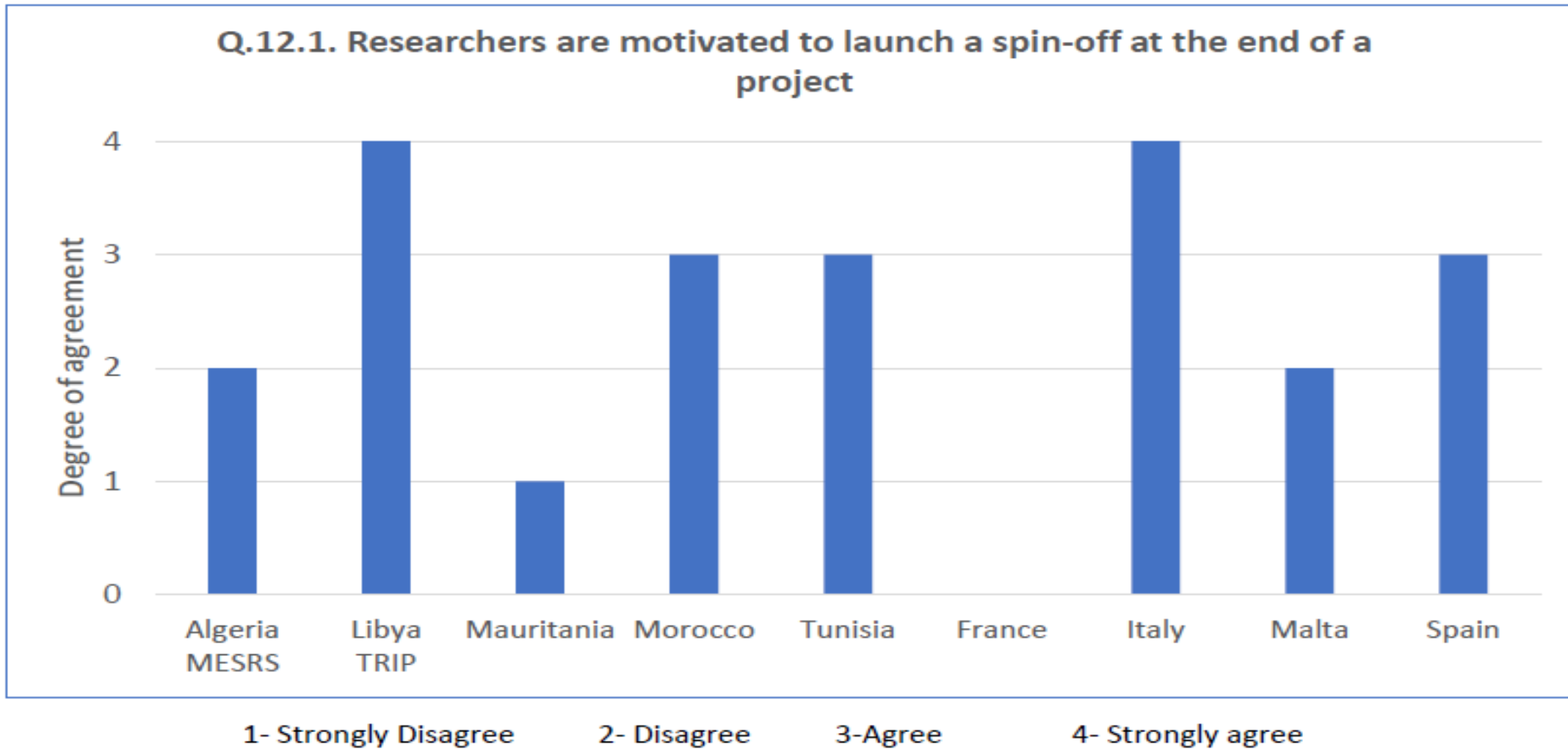
**Suggestion for future work in Dialogue 5+5:** Analysis of the services provided by business incubators in the region and to promote the creation of advanced programmes like “soft landing” in other countries for spin-offs generated in universities and research centres.

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# Conclusions of the Survey (VIII)



# Conclusions of the Survey (VIII)



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# Conclusions of the Survey (VIII)

**The interest in the exploitation of research results in universities and research centres in the region will grow in the next three years**

- a. Convincement on a growing interest in this issue for the next years.
  - i. Positive economic consequences of technology transfer (mentioned by Italy).
- b. This interest will feed-up regulatory changes
  - i. Current legislation is not enough to give TT and IP the relevance and support needed.
- c. Most cited objectives for regulatory changes are:
  - i. The creation of programmes, better support to researchers, proof of concepts.
  - ii. Italy mentions the modification of IPR (abolition of the "Professor's Privilege").

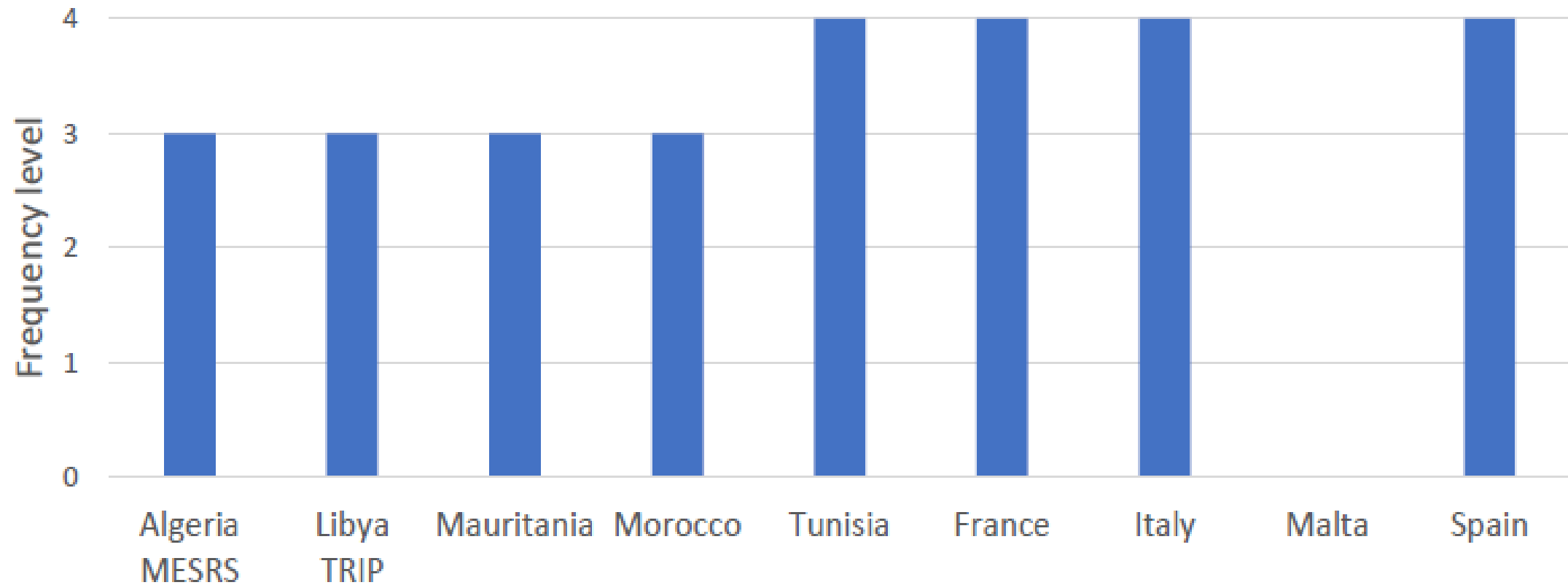
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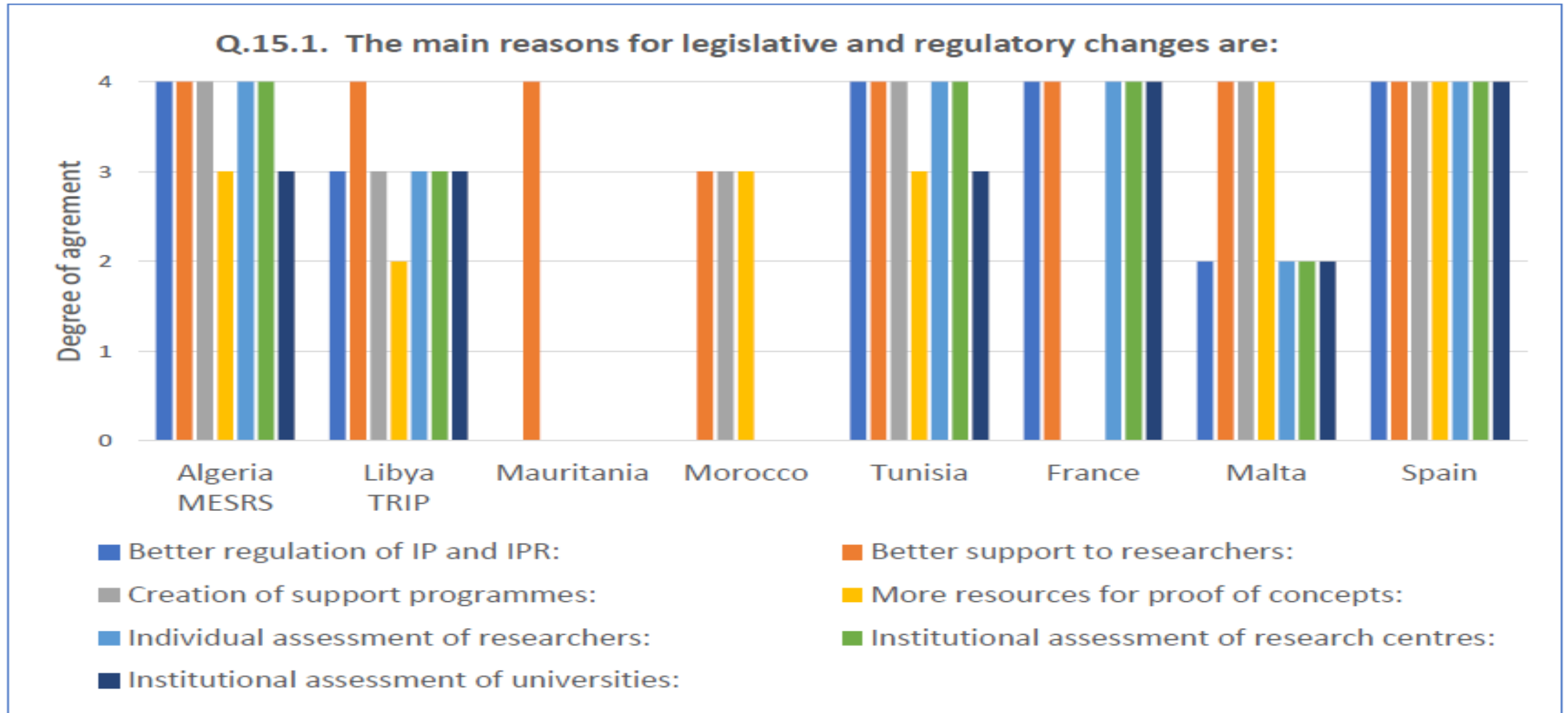
# Conclusions of the Survey (VIII)



Q.15. There are plans in the country to modify the legislation to favour the exploitation of the research results in the next three years



# Conclusions of the Survey (VIII)



1- Strongly disagree

2- Disagree

3- Undecided

4- Agree

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# Conclusions of the Survey (IX)

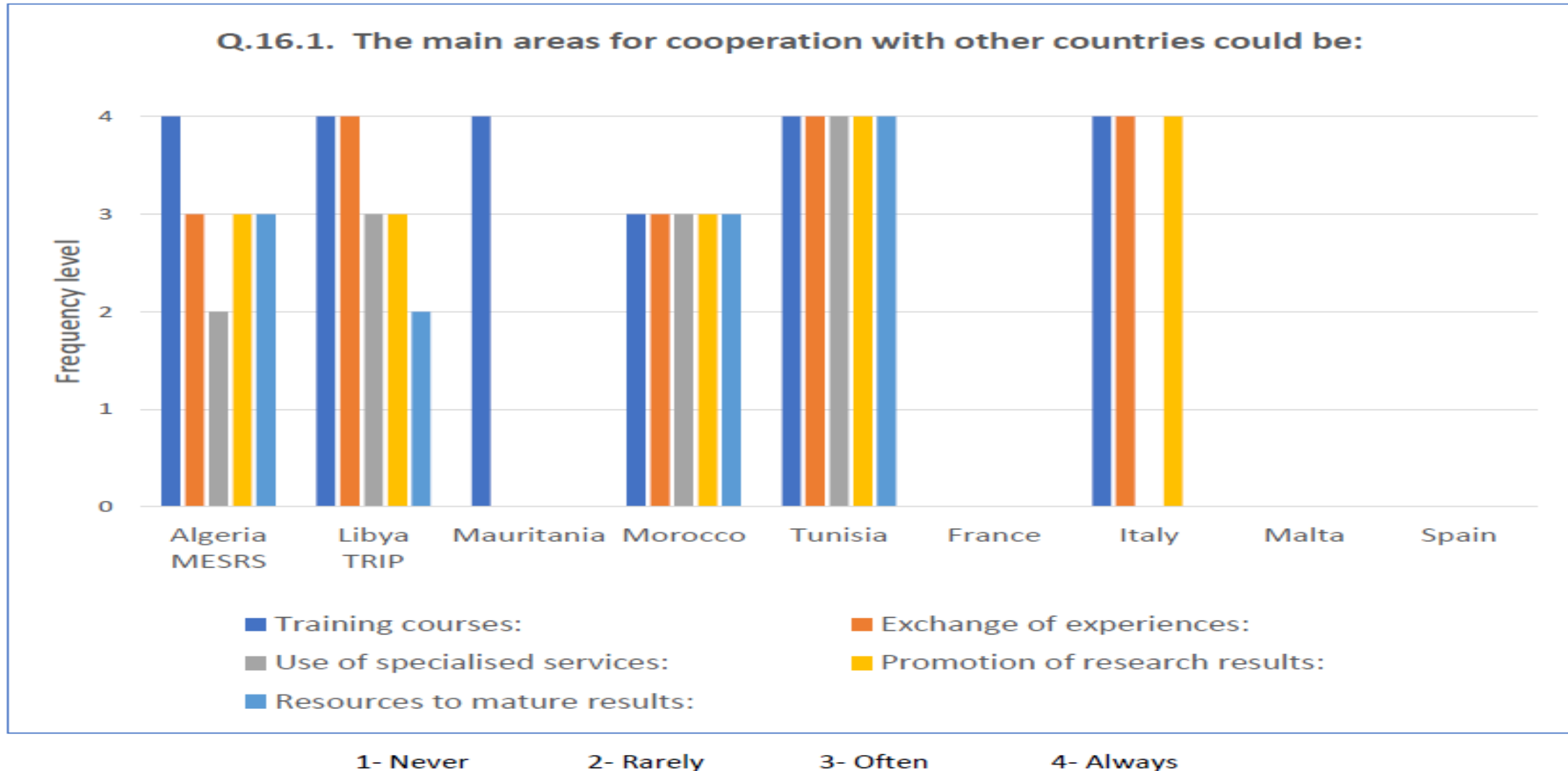


**Cooperation with other countries seems relevant for all countries answering this question.**

- a. Most relevant areas for cooperation are training, exchange of experiences and promotion of research results.
- b. Cooperation in the framework of Dialogue 5+5 is envisaged as useful.

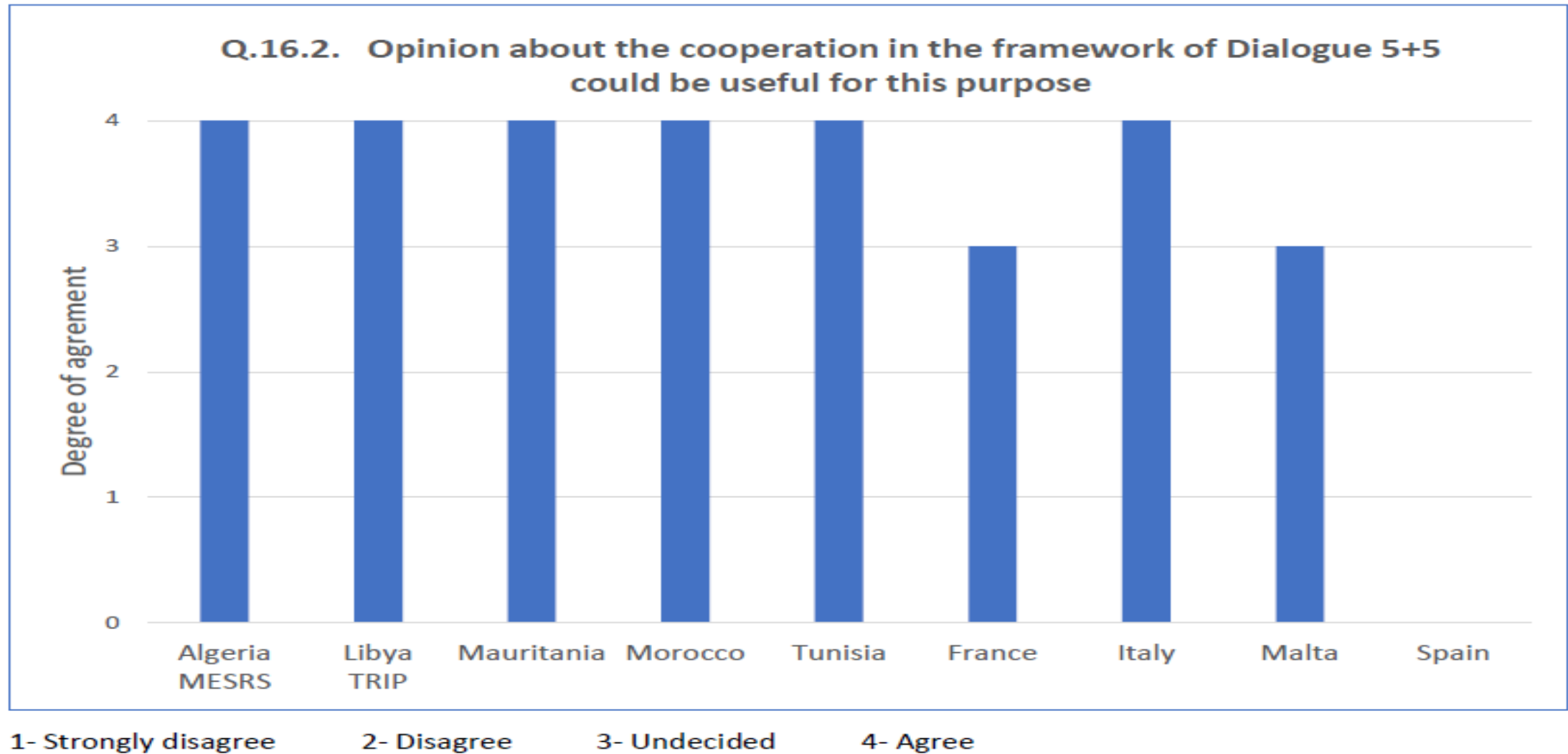
**Suggestion for future work in Dialogue 5+5:** Continue the discussion in the GSO to reach consolidated conclusions for the next Ministerial Conference in 2022 and to feed-up the next work programme.

# Conclusions of the Survey (IX)





# Conclusions of the Survey (IX)



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# Conclusions of the Survey (XXVIII)

## Next steps on A3

- To review the collected data during this seminar
  - ✓ If possible, to complete data when necessary
- To discuss the preliminary conclusions of the report and the suggestions
- To elaborate a second version of the report
  - ✓ by adding information from delegations
  - ✓ Deadline 22<sup>nd</sup> November
- To present the refined version in the GSO meeting