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ICH Q12 (Pharmaceutical Product Lifecycle Management): PMDA Perspective

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Background

ICH Quality Vision 2003

Develop a harmonised pharmaceutical quality system applicable across the life cycle of the product emphasizing an integrated approach to quality risk management and science

➔ ICH Q8~Q11, Points to Consider, Q&As

[Potential Opportunity] (ICH Q10 Annex 1)

- ▶ optimise science and risk based post-approval change processes to maximise benefits from innovation and continual improvement.

[Current Situation]

- ▶ The envisioned post-approval 'operational flexibility' has not been achieved as the main emphasis at ICH to date has focused on early stages of the product lifecycle.
- ▶ The lack of harmonized approaches for technical and regulatory aspects for lifecycle management can hinder innovation and continual improvement.

➔ ICH Q12: Pharmaceutical Product Lifecycle Management

Issues to be addressed in ICH Q12

From ICH Q12 Concept Paper

► Regulatory Dossier

- Explore the development of a harmonised approach to “regulatory commitments” for inclusion in the guideline. Such approaches could enable post approval changes that facilitate continual improvement and encourage the adoption of innovative technologies.
- Delineate the appropriate level of detail and information necessary for regulatory assessment and inspection in the dossier, in order to create a more enabling post approval change management system.

► Pharmaceutical Quality System (PQS) aspect

- Establish criteria for a harmonised risk-based change management system based on product, process and/or clinical knowledge that effectively evaluates the impact of change on quality, and, as applicable to safety and efficacy.
- Clarify expectations and reinforce the need to maintain a knowledge management system that ensures continuity of product and process information over the product lifecycle.

► Post-Approval Change Management Plans and Protocols

- Introduce the concept of a post-approval management plan that can be used to proactively identify post-approval changes and the mechanism to submit and assess these changes by regulatory authorities (Assessors and Inspectors)
- Establish criteria for post-approval change management protocols that can be adopted by the ICH regions (enabling a harmonised proactive approach for lifecycle management)
- Encourage enhanced product development and control strategy approaches (Quality by Design (QbD)) providing opportunities for scientific and risk based foundations for post-approval change management plans.

ICH Q12 activity so far

- ▶ 2014 November – to date
 - Six (6) ICH F2F meetings
 - Two (2) Interim meetings
- ▶ 2017 June: Step1 (Agreement among EWG members)

Step 1 document - Core Guideline (35 pages)-

1. Introduction
 2. Categorization of Post-approval CMC Changes
 3. Established Conditions (ECs)
 4. Post-Approval Change Management Protocol (PACMP)
 5. Product Lifecycle Management (PLCM)
 6. Pharmaceutical Quality System and Change Management
 7. Relationship between Regulatory Assessment and Inspection
 8. Post-approval Changes for Marketed Products
 9. Glossary
 10. References
- Appendix1: CTD Sections that contain ECs
- Appendix2: Principles of Change Management

Step 1 document - Annex (19 pages)-

Annex I: ECs- Illustrative Examples

Annex IA: Chemical Product

Annex IB: Biological Product

Annex II: PACMP- Illustrative Examples

Annex IIA: PACMP Example 1

Annex IIB: PACMP Example 2

Annex III: PLCM Document- Illustrative Examples

Objectives and Scope

► Objectives include:

- Provide a framework to facilitate the management of post-approval Chemistry, Manufacturing and Controls (CMC) changes in a more predictable and efficient manner across the product lifecycle
- Optimization of industry and regulatory resources
- Support innovation and continual improvement and help to assure drug product supply

► Scope

- pharmaceutical drug substances (i.e., active pharmaceutical ingredients) and pharmaceutical drug products, including marketed chemical, and biotechnological/biological products.
- The guideline also applies to drug-device combination products that meet the definition of a pharmaceutical or biotechnological/biological product.
- Changes needed to comply with revisions to pharmacopoeial monographs are not in scope of this guideline.

ICH Q12 Regulatory Tools and Enablers

- ▶ Provide a framework to facilitate the management of post-approval CMC changes in a more predictable and efficient manner across the product lifecycle
- ▶ Regulatory Tools and Enablers
 - Categorization of Post-approval CMC Changes
 - Established Conditions (ECs)
 - Post-Approval Change Management Protocol (PACMP)
 - Product Lifecycle Management (PLCM)
 - Pharmaceutical Quality System and Change Management
 - Relationship between Regulatory Assessment and Inspection
 - Post-approval Changes for Marketed Products

Established Conditions (ECs)

- ▶ Although the Common Technical Document (CTD) format has been defined for a marketing application, there are no previously harmonized approaches to defining which elements in an application are considered necessary to assure product quality and therefore would require a regulatory submission if changed post-approval.
- ▶ These elements are being defined in this guideline as “Established Conditions for Manufacturing and Control” (referred to as ECs throughout this guideline).
- ▶ ECs are legally binding information (or approved matters) considered necessary to assure product quality. As a consequence, any change to ECs necessitates a submission to the regulatory authority.

Established Conditions (ECs)

- ▶ CTD sections that contain ECs (Appendix 1)
- ▶ Identification of ECs for the Mfg. Processes (Section 3.2.3.1, Annex I)
- ▶ Identification of ECs for Analytical Procedures (Section 3.2.3.2)
- ▶ Revisions of ECs (Section 3.2.4)
- ▶ Roles and Responsibility (Section 3.3)
 - The management of all changes to and maintenance of the approved marketing application is the responsibility of the MAH.
 - There is a joint responsibility to share and utilize information b/w the MAH and any manufacturing organizations to assure the marketing application is maintained, reflects current operations, and that changes are implemented appropriately across relevant sites.
 - Maintenance of the marketing application (including aspects that are not identified as ECs) should follow regional expectations.

Approved Matters and Established Conditions

Japan



Module 3

Summarized



Module 2 (QOS)

Extracted

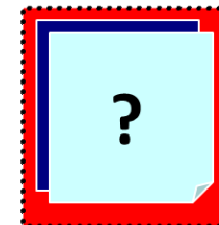


Module 1
(Application Form)
Approved Matters

ICH

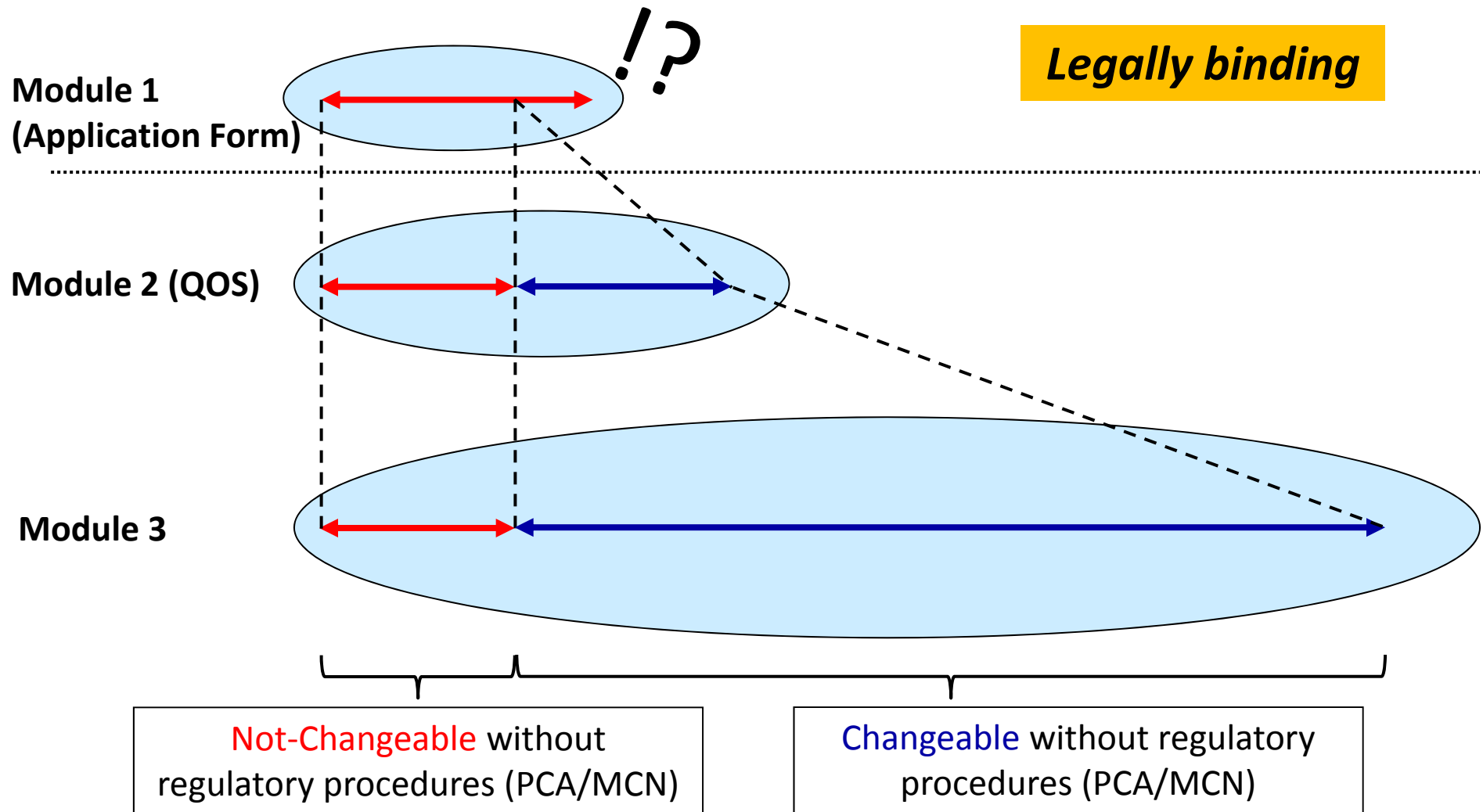


Module 3



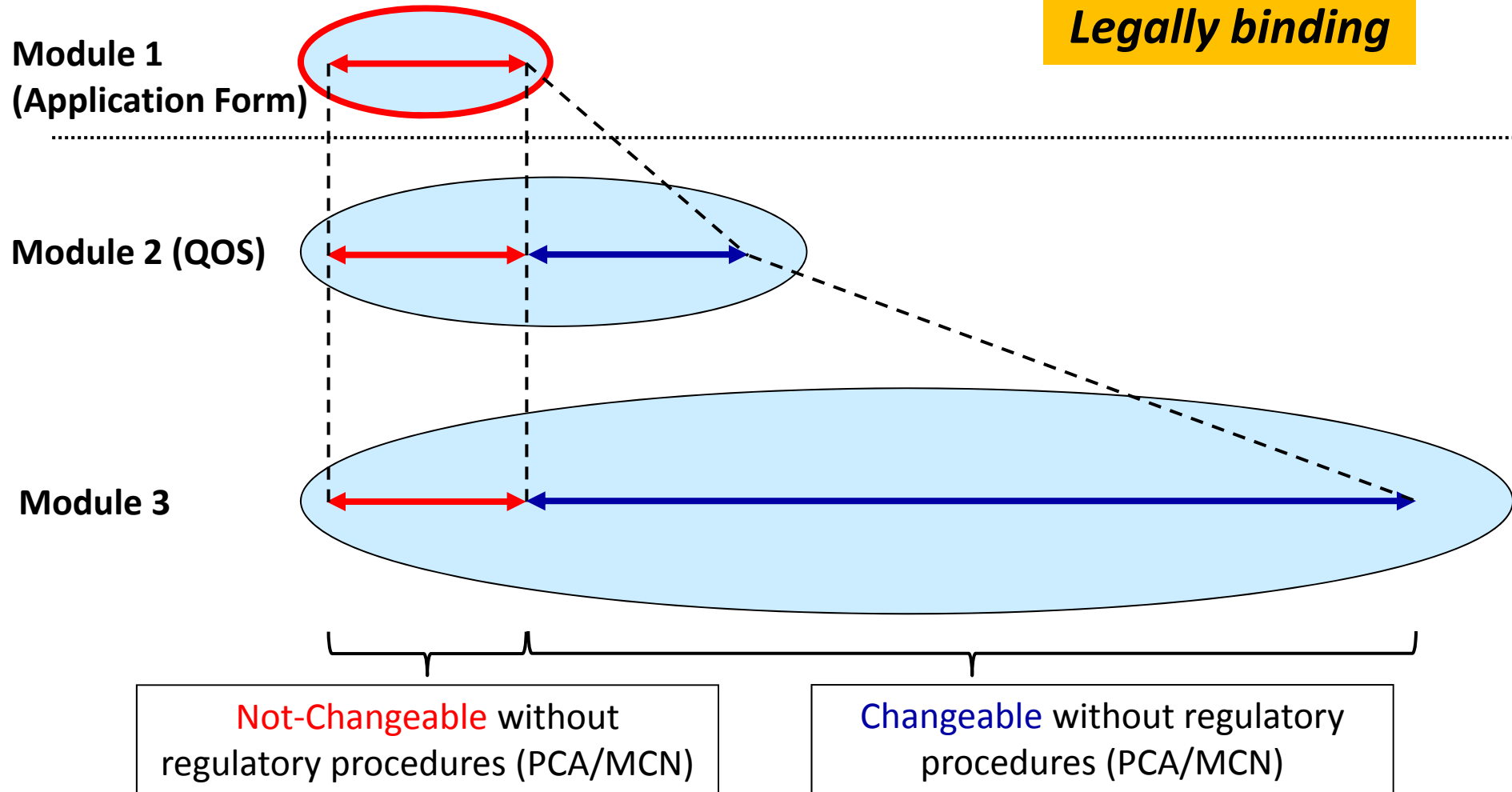
Established Conditions

Rational Regulatory Oversight in Japan

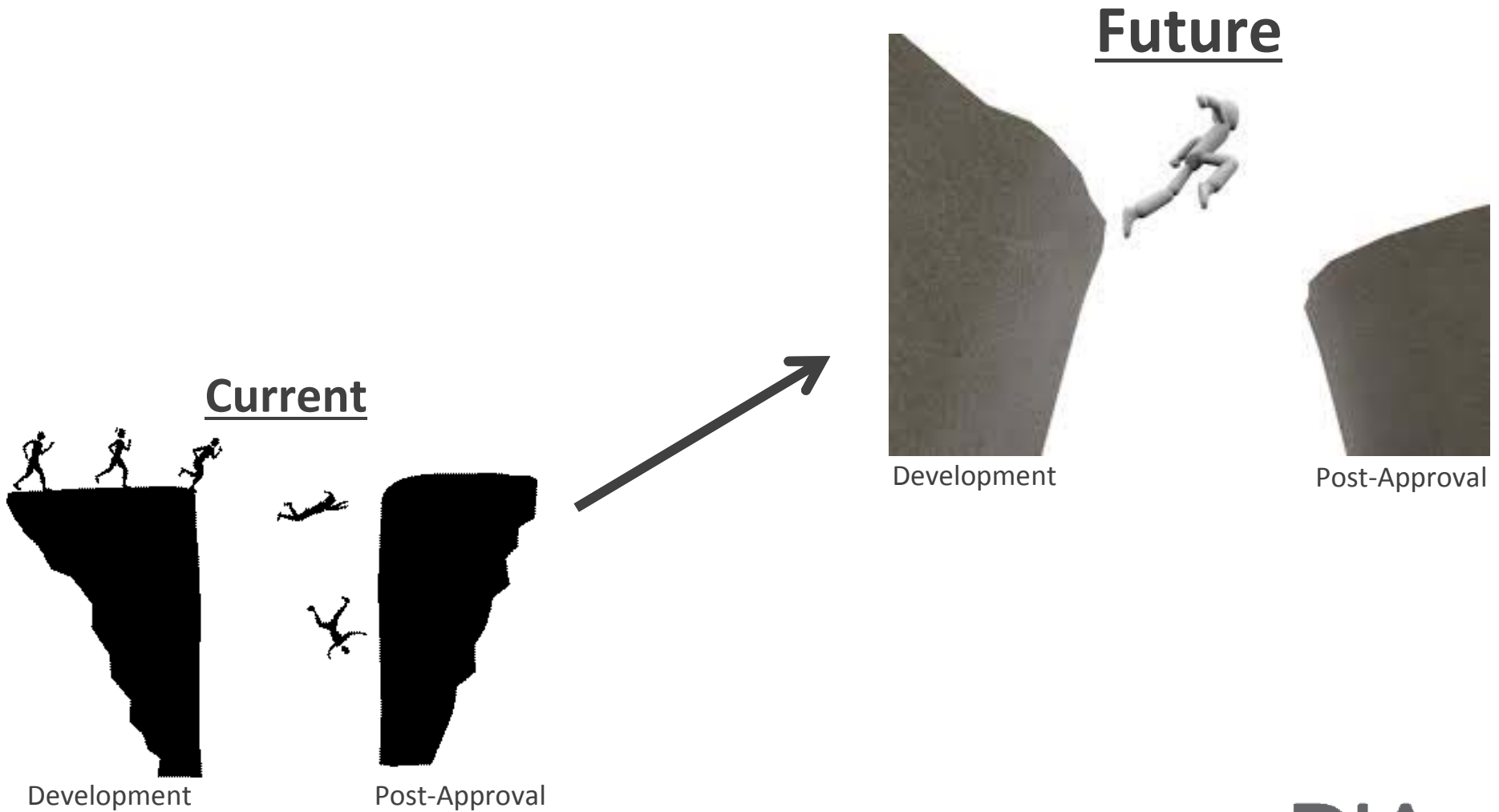


Rational Regulatory Oversight in Japan

Legally binding



My Expectations...



Regional initiatives and ICH activities



Revision of PAL



Pharmaceutical cGMPs for the 21st Century



Guidance on parametric release



EMA-FDA Pilot Program for QbD (PMDA joined as an observer)

ICH Quality Vision 2003

Q8, 9, 10, 11, PtC, Q&As

Q12

2005

2010

2015

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Ask

