

SC32WG2 N1425

Final Report on MFI & MDR Harmonization

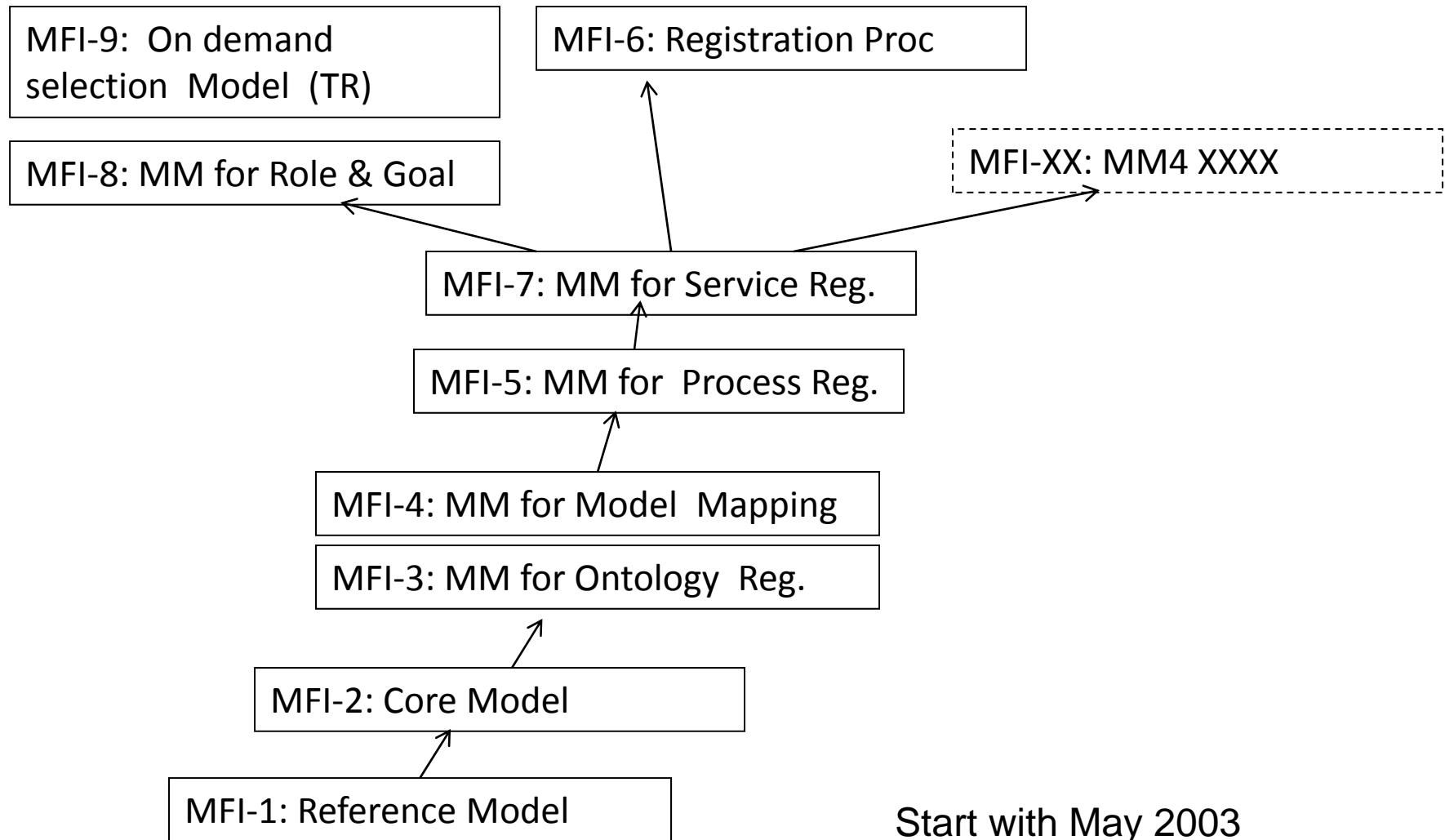
May 2010

Hajime Horiuchi

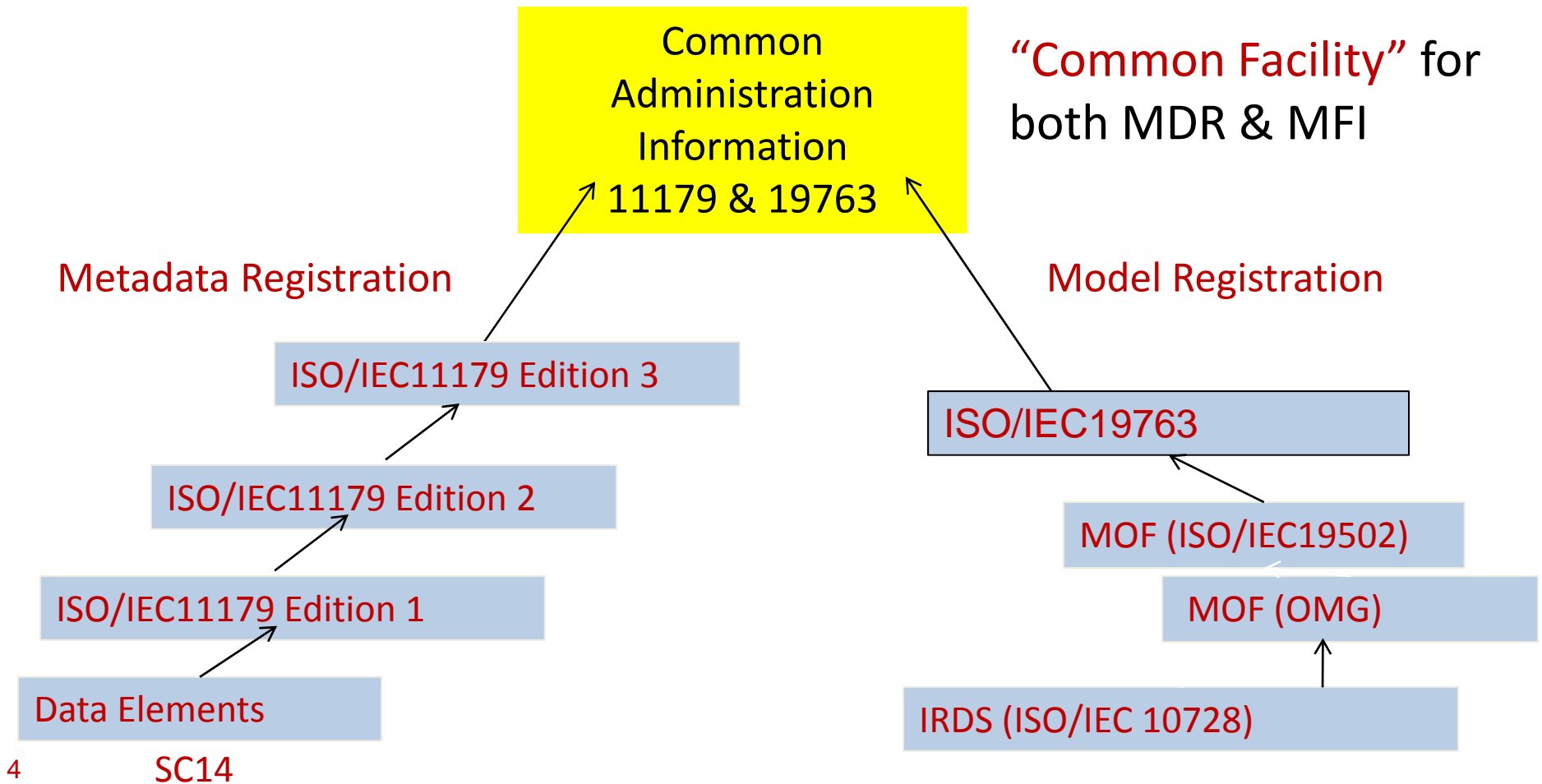
Harmonization Study

- Initiated at the Jeju Meeting (June 2009)
- To investigate possibility of the extraction of common parts on MDR(ISO/IEC1119) & MFI (ISO/IEC19763)

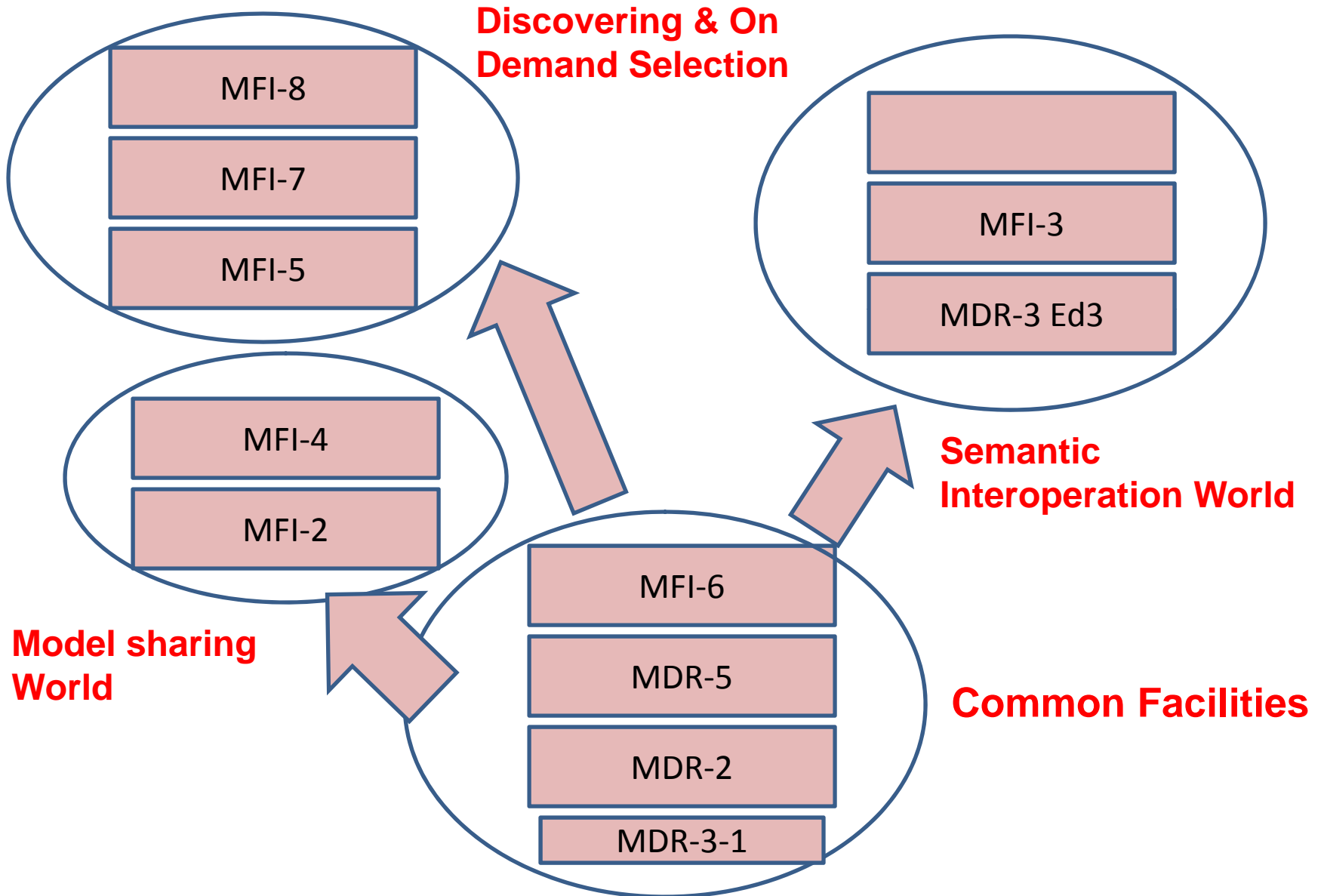
Evolution of MFI



Expected Evolution of MDR & MFI (1) – Align the Two Families of Standards so That Common Facilities Can Be Built



Notion to the study



We should define

INTEGRATION POLICY

Policy Jeju-1

- Align 11179 Part 6 (new edition) with 19763-6 . These are different standards, but should be aligned, not combined.
- During development of the two standards, the editors should be careful to align the specifications of the two standards.
- We should not combine 11179-6 and 19763-6 into a single standard.

Issues to be addressed

1. The Repackaging of the whole MFI and MDR needs to clarify the difference of the scopes and basic structure of MFI and MDR.
2. One possibility is that MFI Part3 may become a part of MDR, rather than a part of MFI. Common facilities, such as the Registration Package of MDR Part3 Ed3 and MDR Part5, should be neutral both to MDR and MFI.
3. Duplication between MFI Part3 and MDR Part3 Ed3 There is a substantial duplication between MFI Part3 and the Concept System region of MDR Part3 Ed3
4. Whether MOF or UML should be used to define the metamodel (or model) of MFI and MDR MFI uses MOF, where as MDR uses UML. There is no essential problem., but WG2 standards should conform to a uniform way.

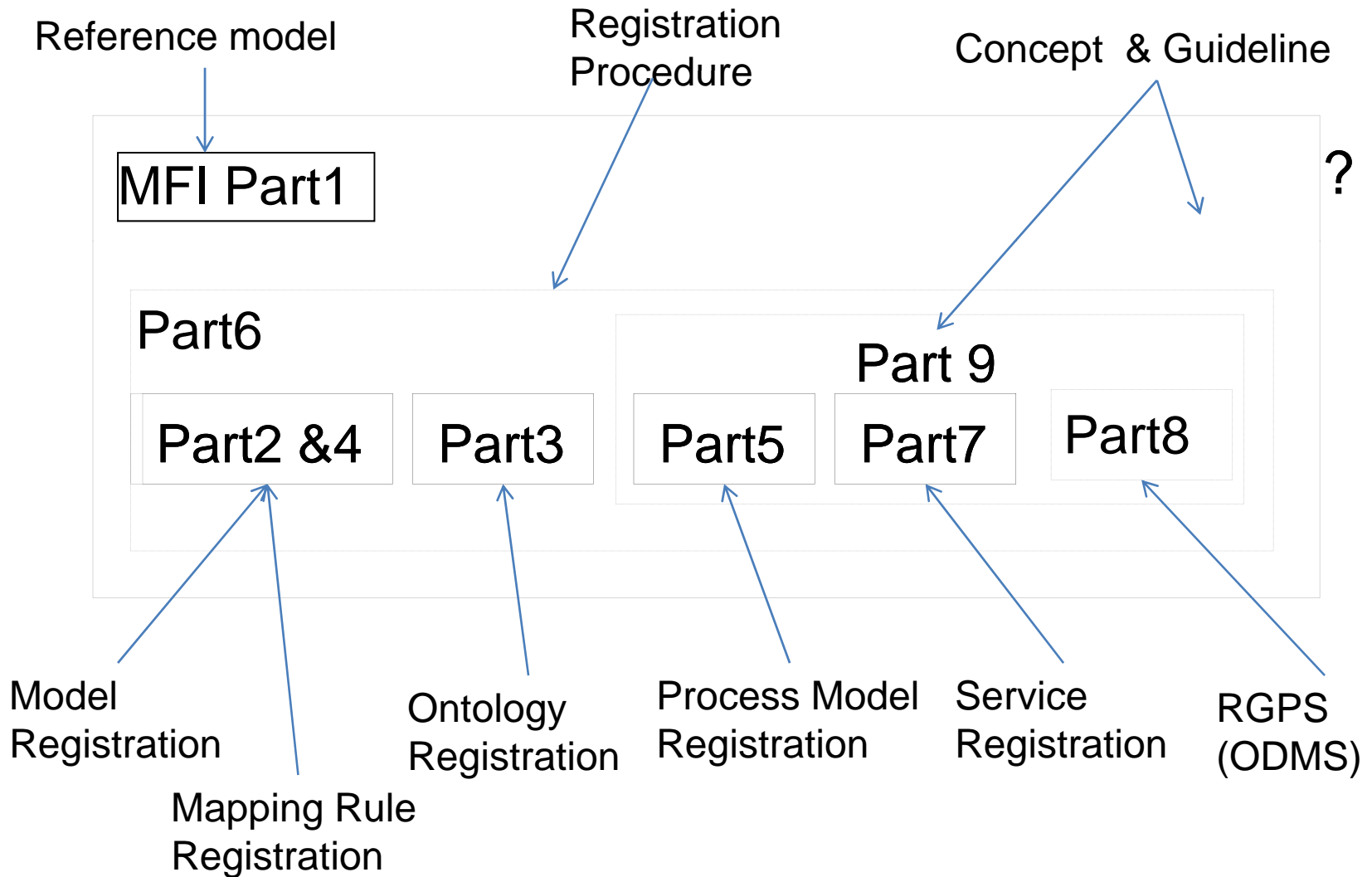
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5. Whether a reference or an association should be used to define a relation MFI uses a reference, where as MDR uses an association. There is no essential problem., but WG2 standards should conform to a uniform way.
6. Styles to define an attribute is different in MFI and MDR They should be almost the same.
7. Numbering policy MDR numbers much smaller sub clauses than MFI does.

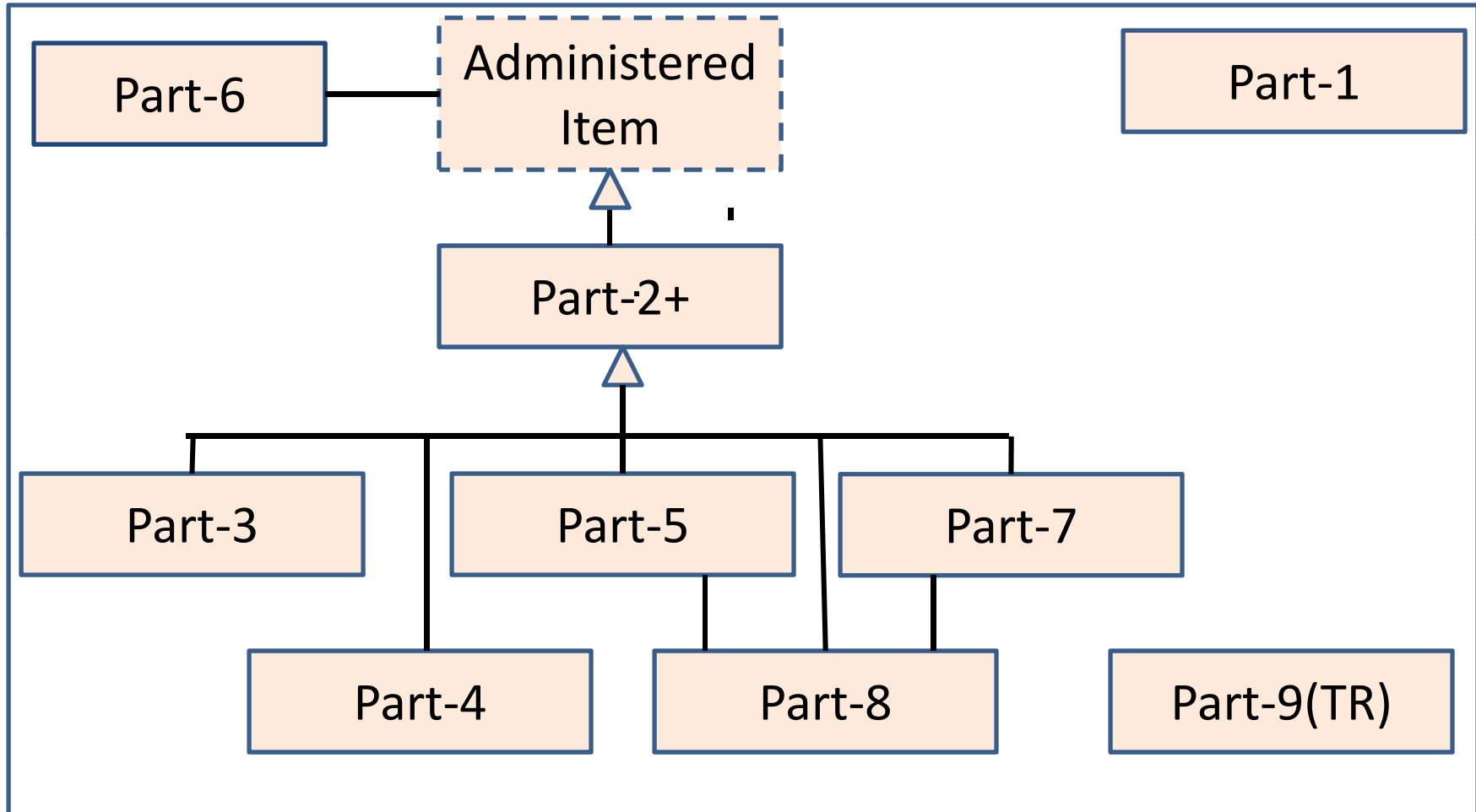
Requirements for the Architecture

- Establish an architectural framework to be referred in the future standardization activities in the ISO/IEC SC32,
- The architecture should provide a structural view of related standards, showing an information sharing infrastructure where each standard to be located , in order to increase the high level and smooth sharing of data, information and models through the registrations in the coming new paradigm such as the Cloud computing or the Grid computing.
- The exchanging of data, information and models should be supposed to be done through the Web services.

Latest MFI structure (as of may 2010)

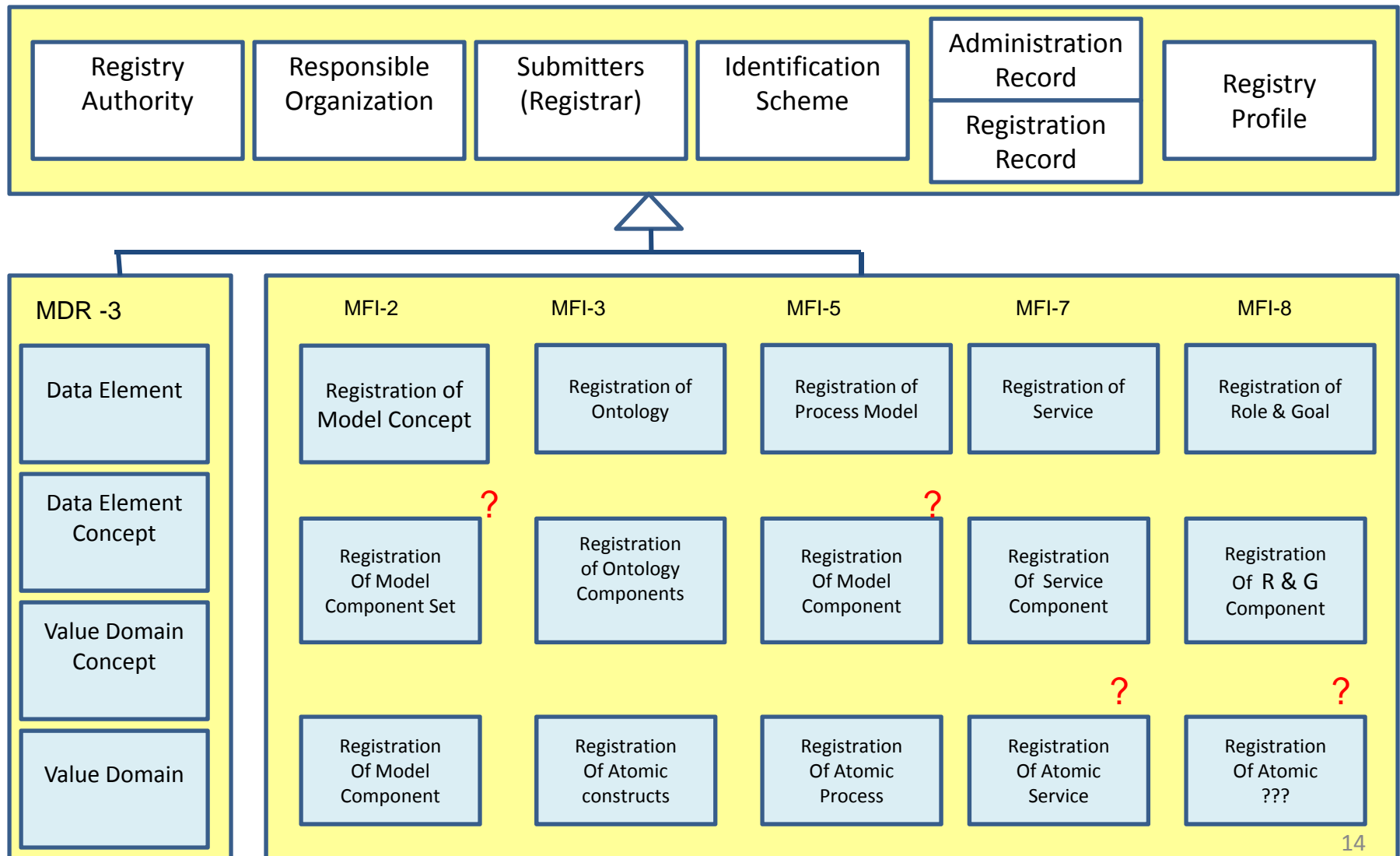


Part Relationship in MFI

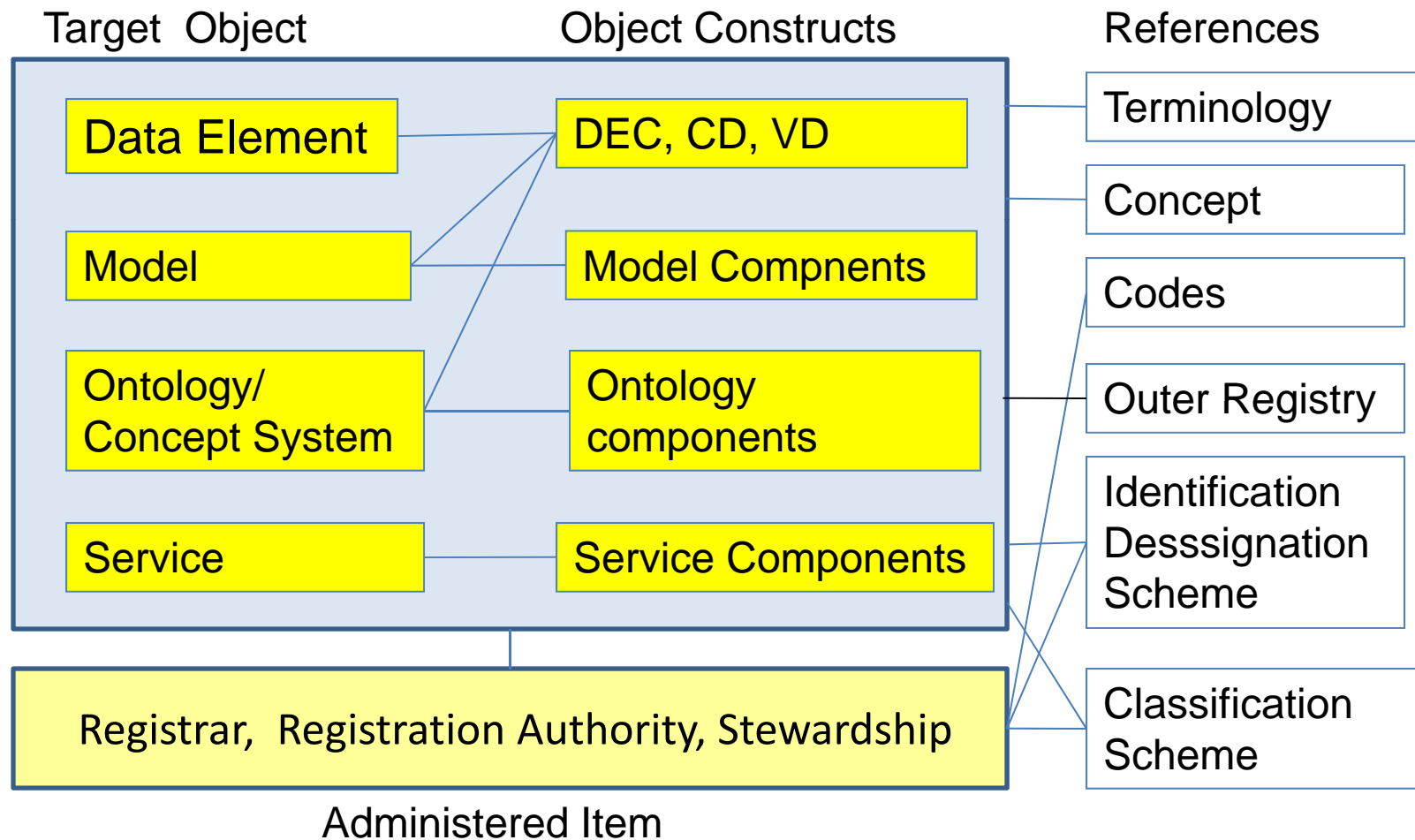


ITEMS TO BE REGISTERED

Objects to be registered

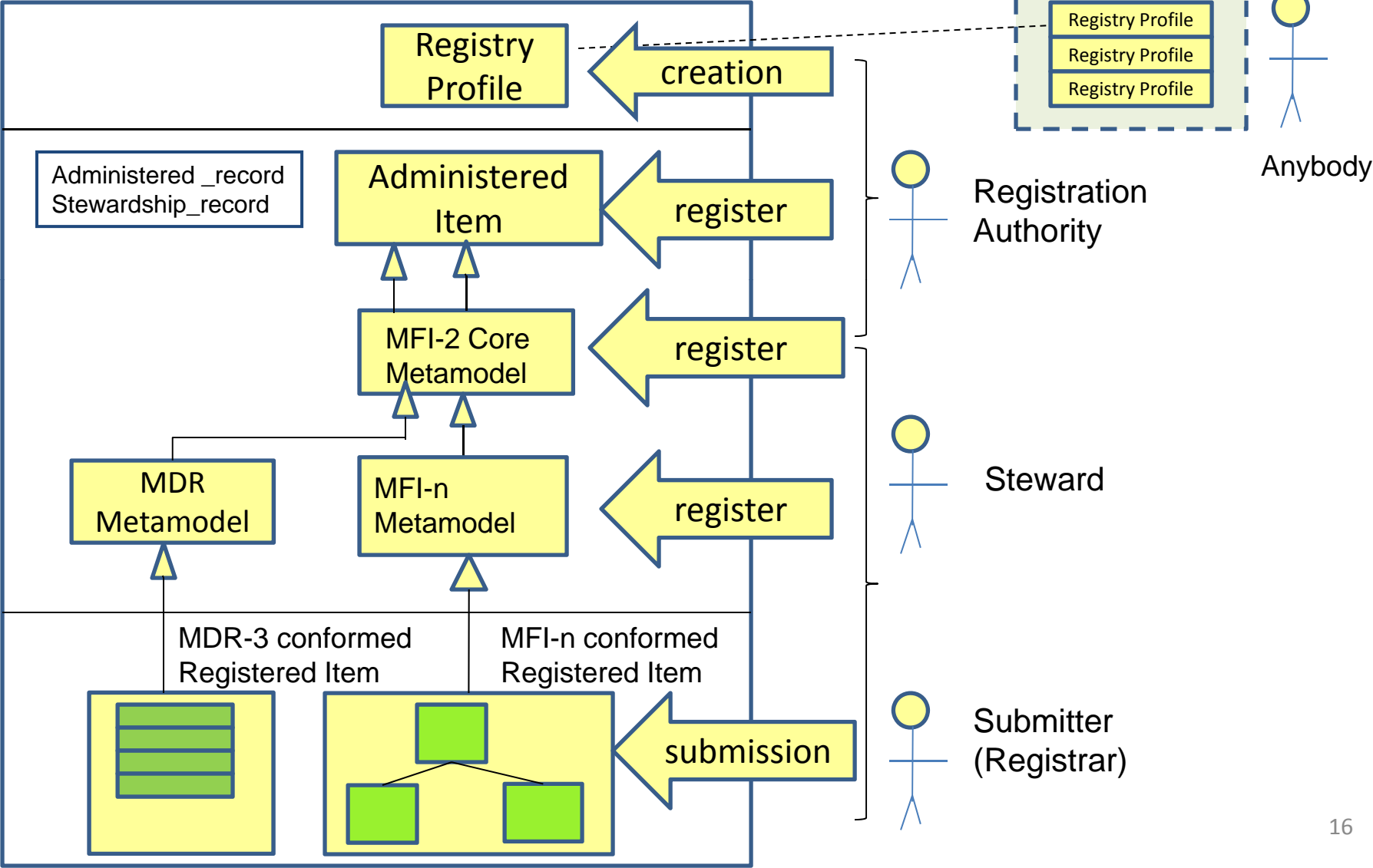


What to be Registered



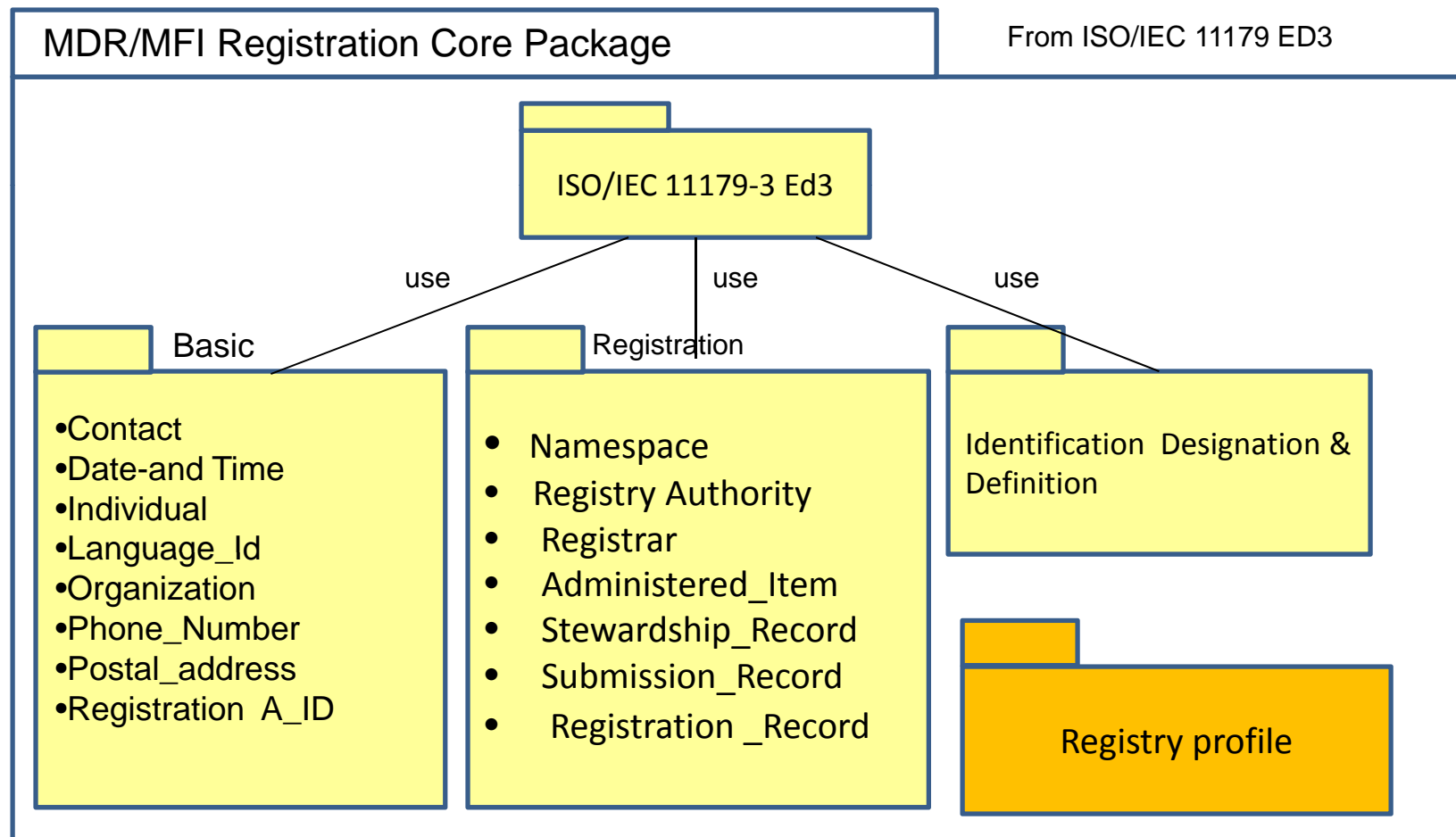
MFI Registration concept

A MFI-n Registry

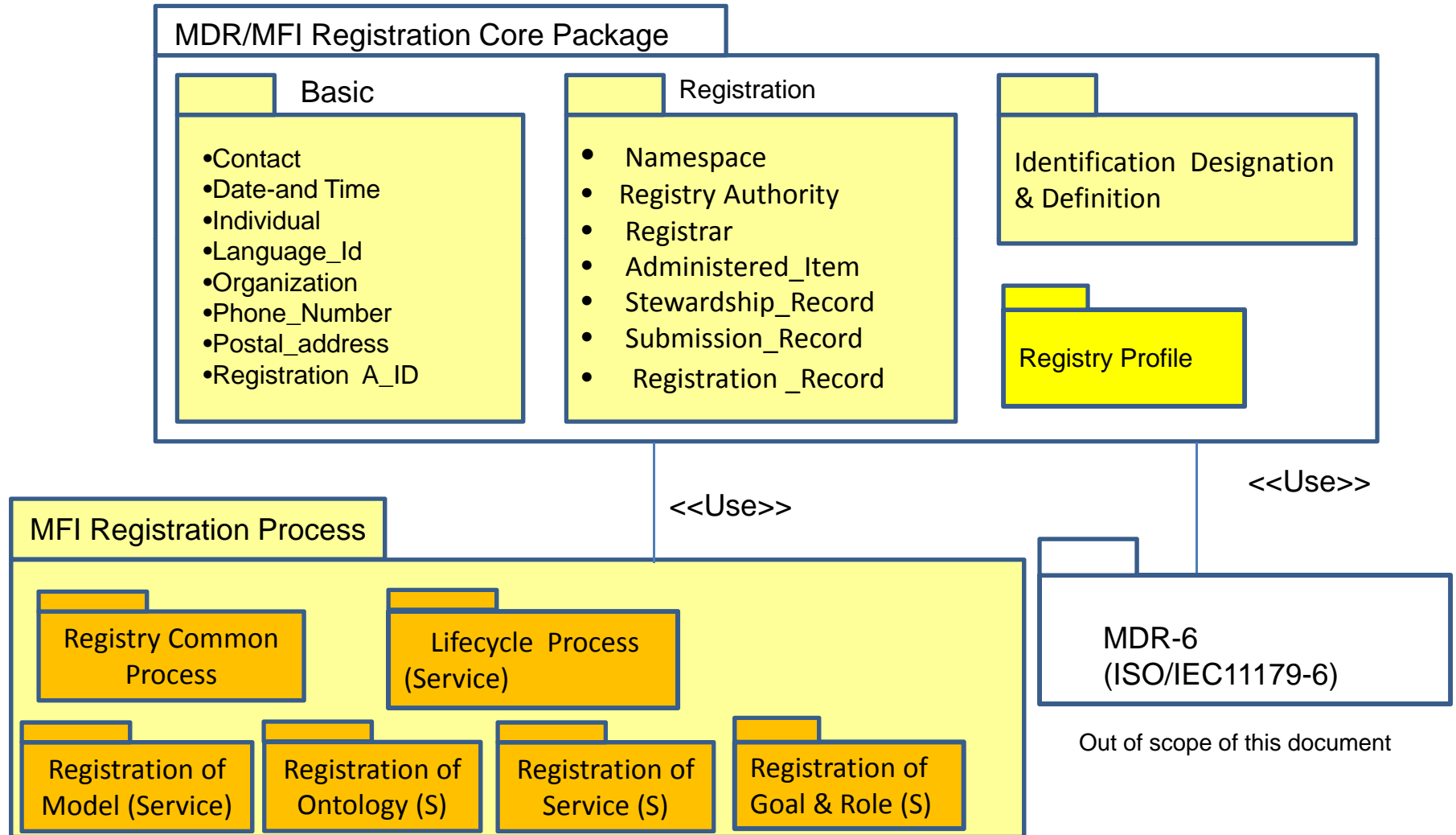


MDR/MFI COMMON MATAMODEL PACKAGE

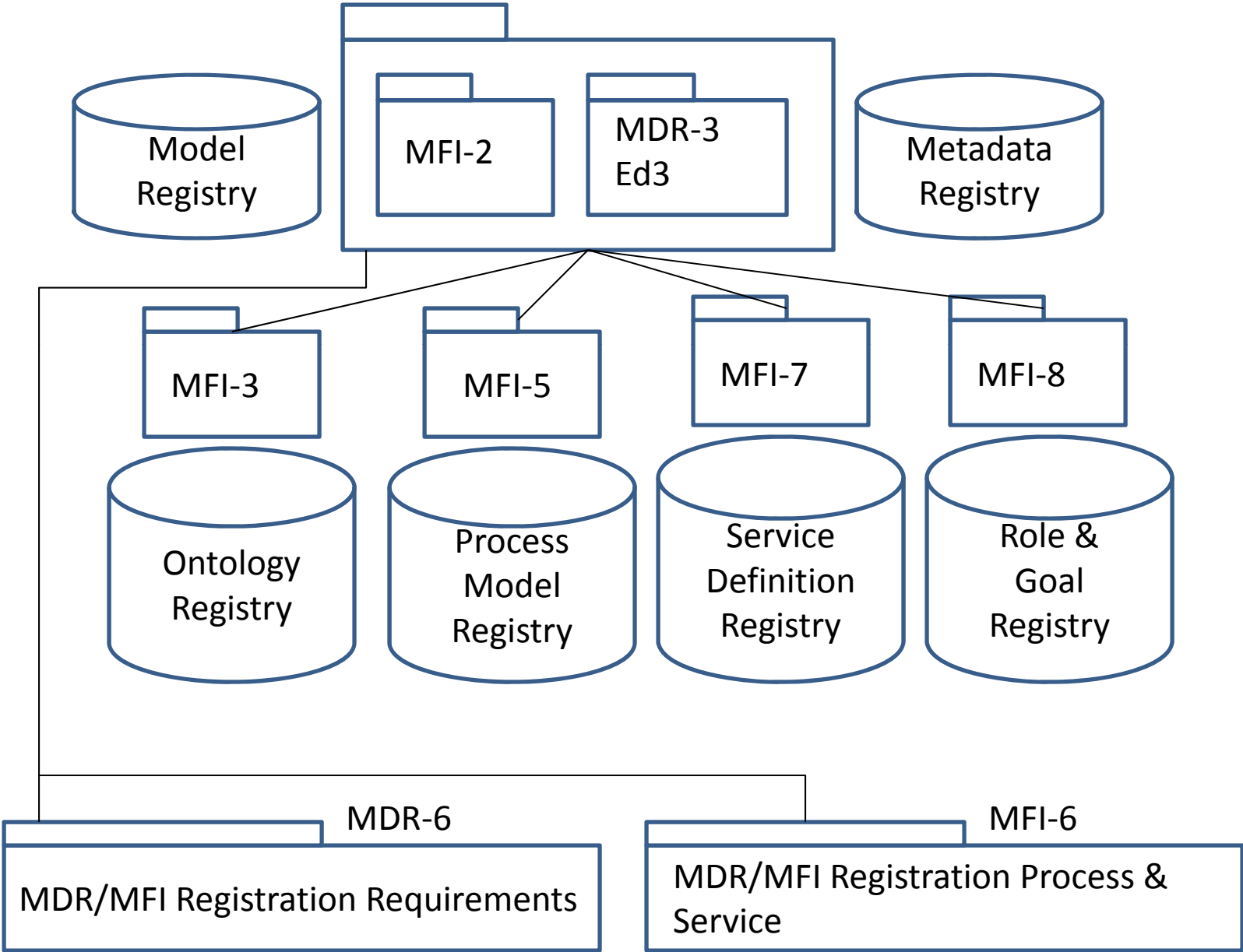
MDR/MFI Registration Common Core Package



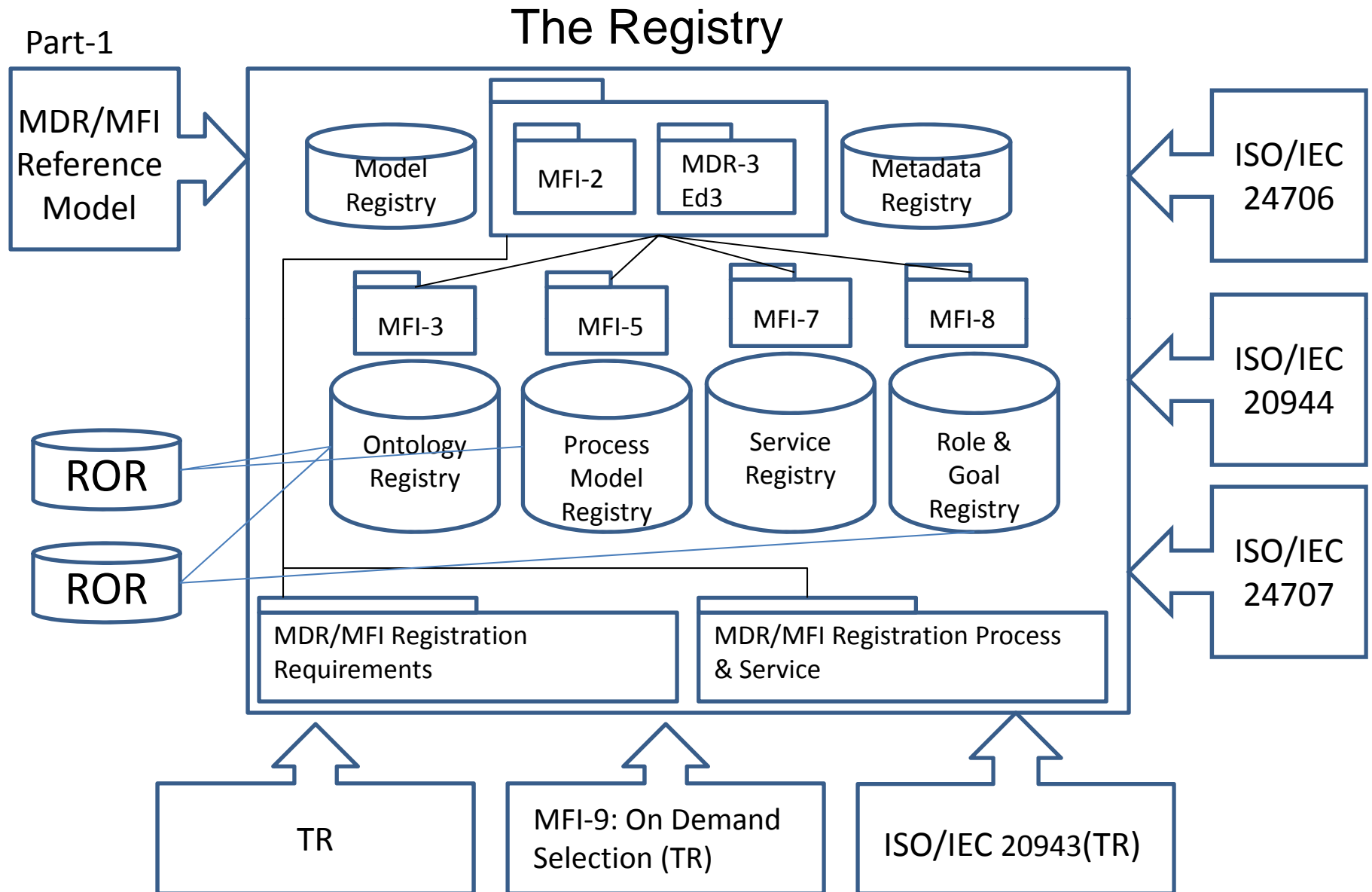
MDR/MFI-6 package (Registration)



Ideal Framework to be discussed



Ideal Goal for WG2



How should SC32WG2 work with or contribute to SC38 in the Cloud era

