

SKOS extensions to cover mapping requirements



Objective



- Applications
 - facilitate reporting about the EU labour market
 - match job opportunities and job searchers across the EU labour market

Problem Setting



- European Labour Market
 - 20+ nationalities, languages and cultures
 - promote job mobility
 - make the labour market more transparent
- Basic documents
 - Vacancies, Curriculum Vitae, ...
- Basic properties in the documents
 - occupations, skills, competencies, qualifications
 - industry sector, region, ...



- **A European classification of occupations, skills and competences as part of a common language**
- **Published as a SKOS complying extension on the internet**

The ESCO Model



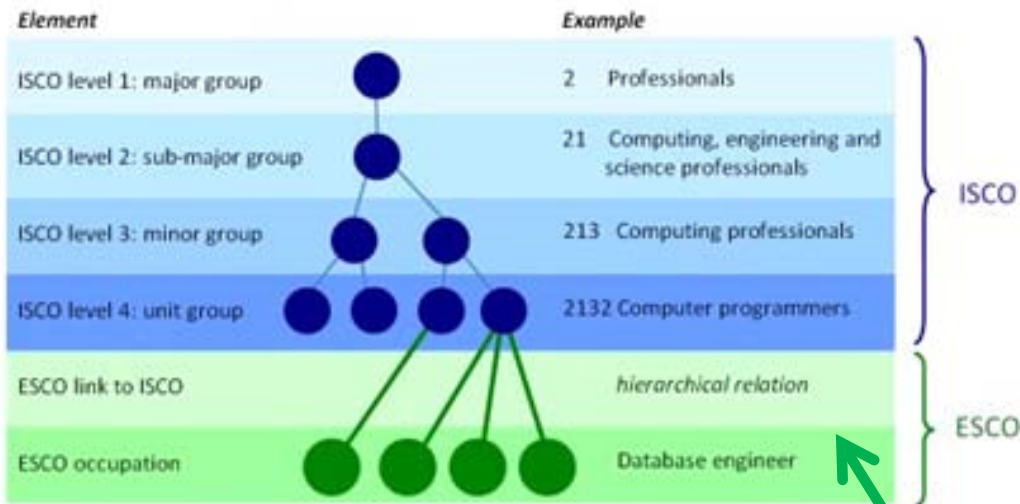
- The European classification for Skills & Competences, qualifications and Occupations
- DG EMPL and DG EAC
(Employment, Social Affairs and Inclusion)
(Education and Culture)

Mapping types



- I. Mapping ESCO to ISCO
- II. Business mappings
- III. Compound mappings

I. Mapping ESCO to ISCO

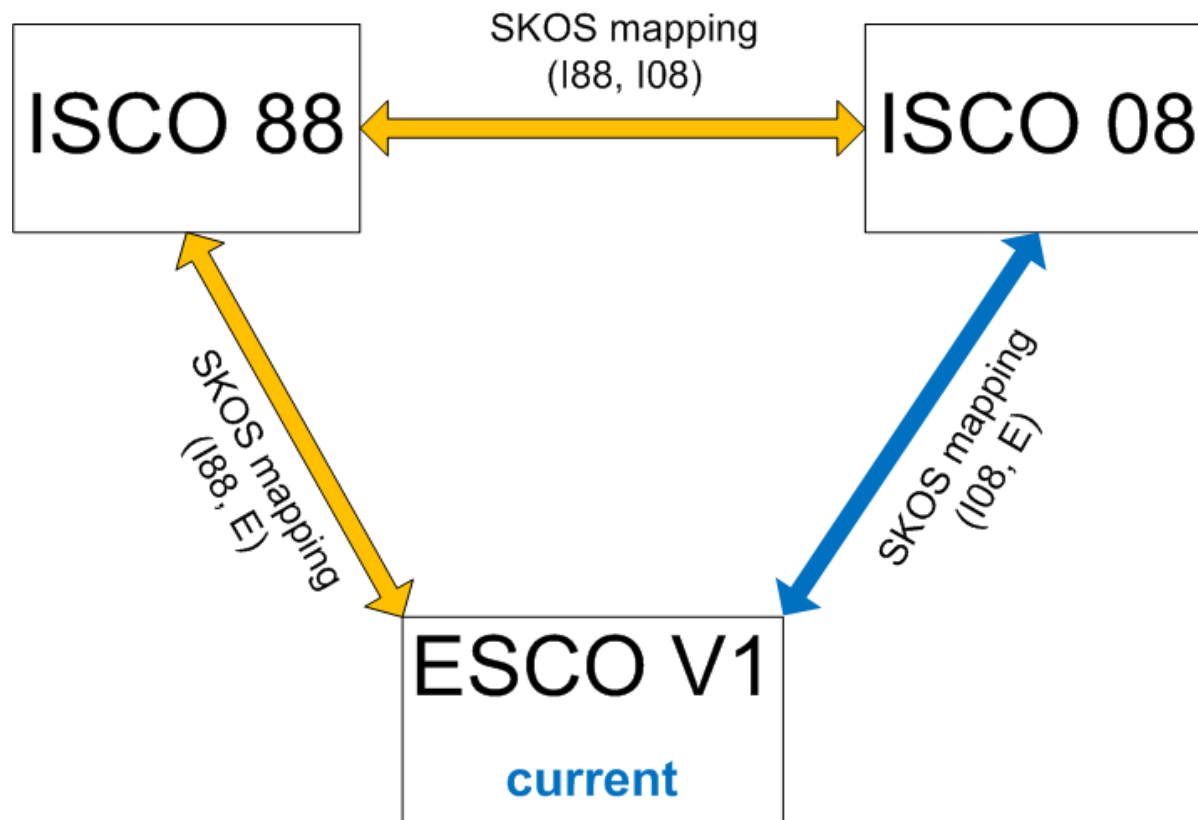


skos:broaderMatch
- esco:broaderInstance

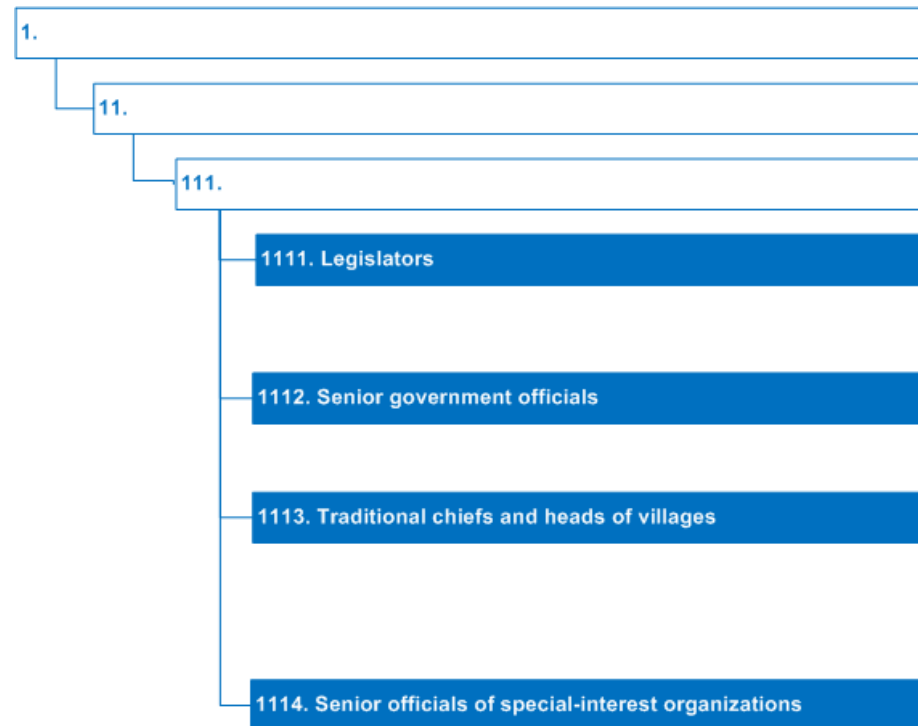
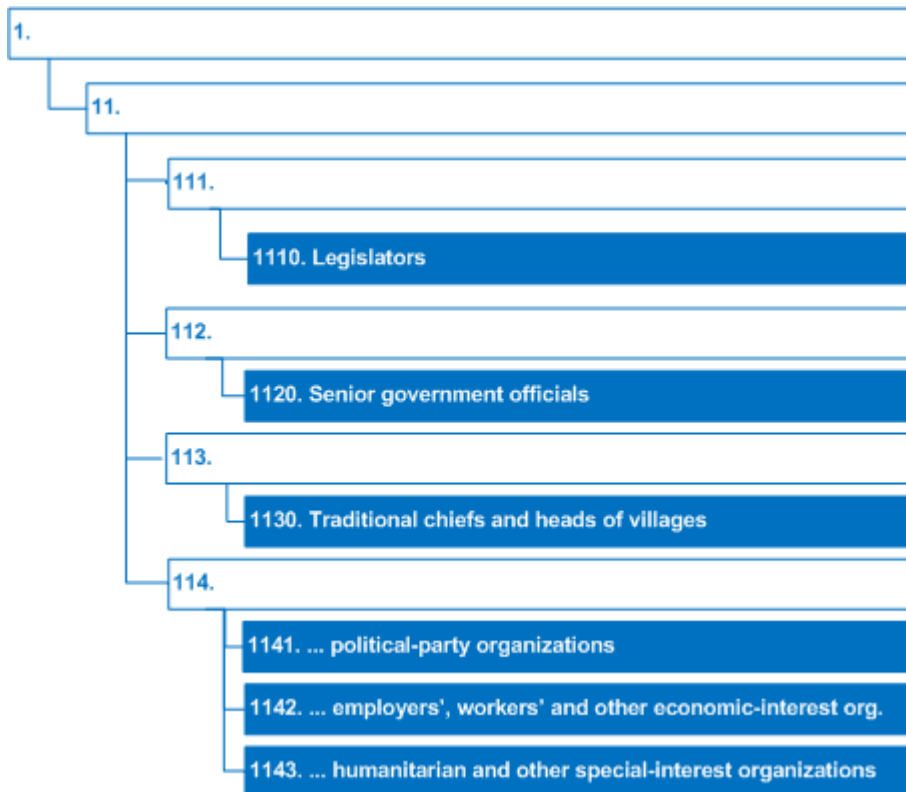
I. Mapping ESCO to ISCO



- Versioning: how to maintain mapping if one of both classifications change?



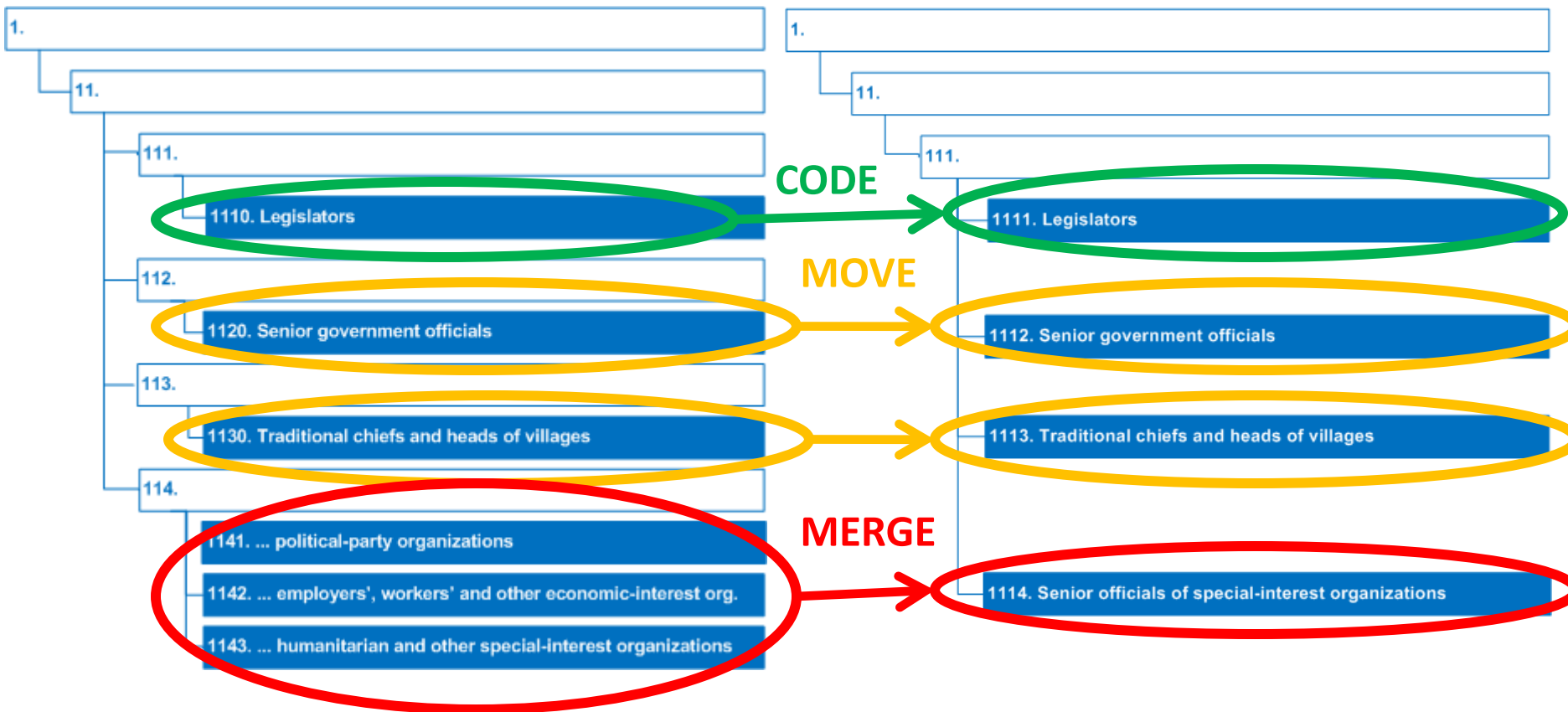
ISCO 88		ISCO 08	
Legislators	1110	1111	Legislators
Senior government officials	1120	1112	Senior government officials
Traditional chiefs and heads of villages	1130	1113	Traditional chiefs and heads of villages
Senior officials of political-party organisations	1141	1114	Senior officials of special-interest organisations
Senior officials of employers', workers' and other economic-interest organisations	1142	1114	Senior officials of special-interest organizations
Senior officials of humanitarian and other special-interest organisations	1143	1114	Senior officials of special-interest organizations



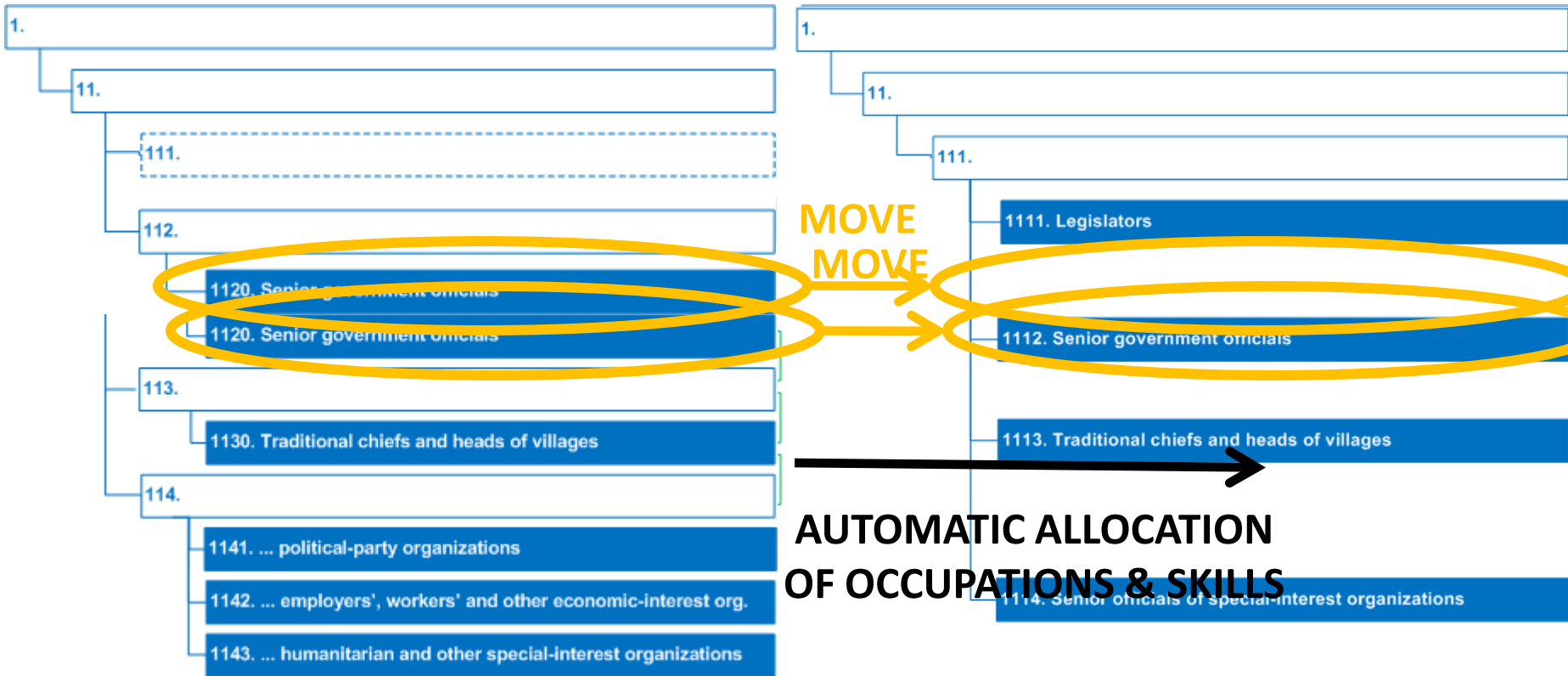
ISCO 88

ISCO 08

Legislators		1110	1111		Legislators
Senior government officials		1120	1112		Senior government officials
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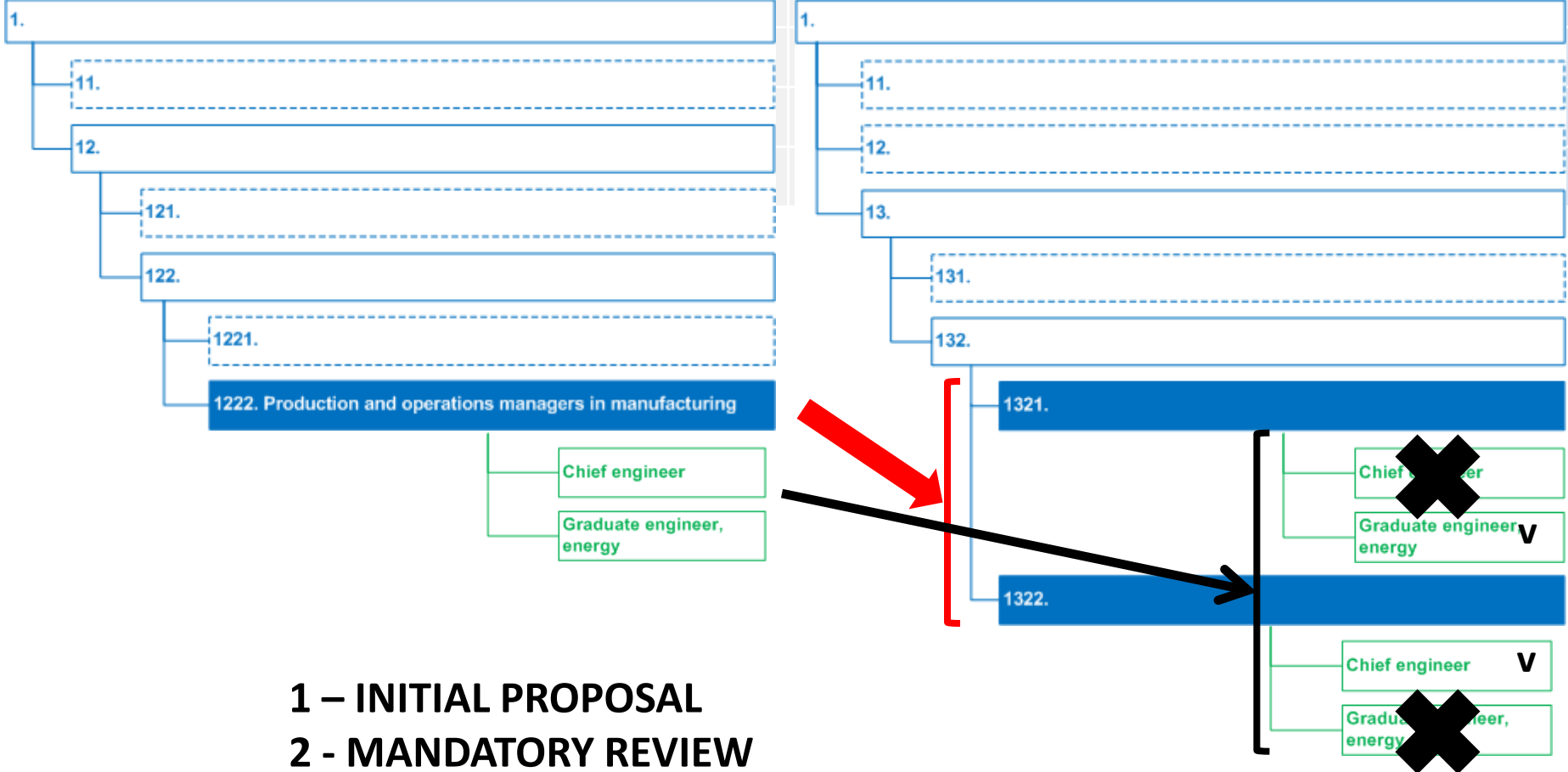


ISCO 88	MOVE	EXAMPLE	ISCO 08
Legislators	1110	1111	Legislators
Senior government officials	1120	1112	government officials
Traditional chiefs and heads of villages	1130	1113	Traditional chiefs and heads of villages
Senior officials of political-party organisations	1141	1114	Senior officials of special-interest organisations
Senior officials of employers', workers' and other economic-interest organisations	1142	1114	Senior officials of special-interest organizations
Senior officials of humanitarian and other special-interest organisations	1143	1114	Senior officials of special-interest organizations



ISCO 88	SPLIT	EXAMPLE	ISCO 08
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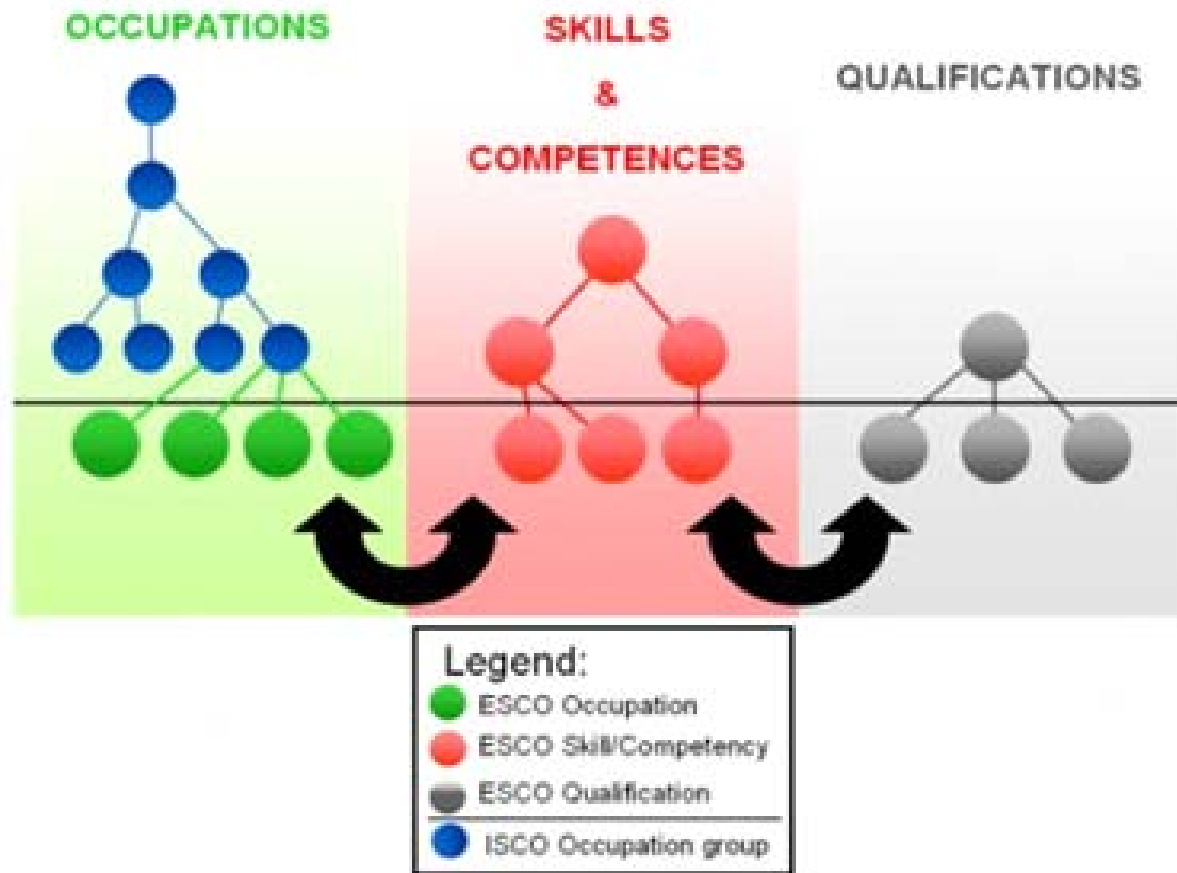
Production and operations department managers in manufacturing	1222	1321	Manufacturing managers
Production and operations department managers in manufacturing	1222	1322	Mining managers
Traditional chiefs and heads of villages	1120	1112	Traditional chiefs and heads of villages



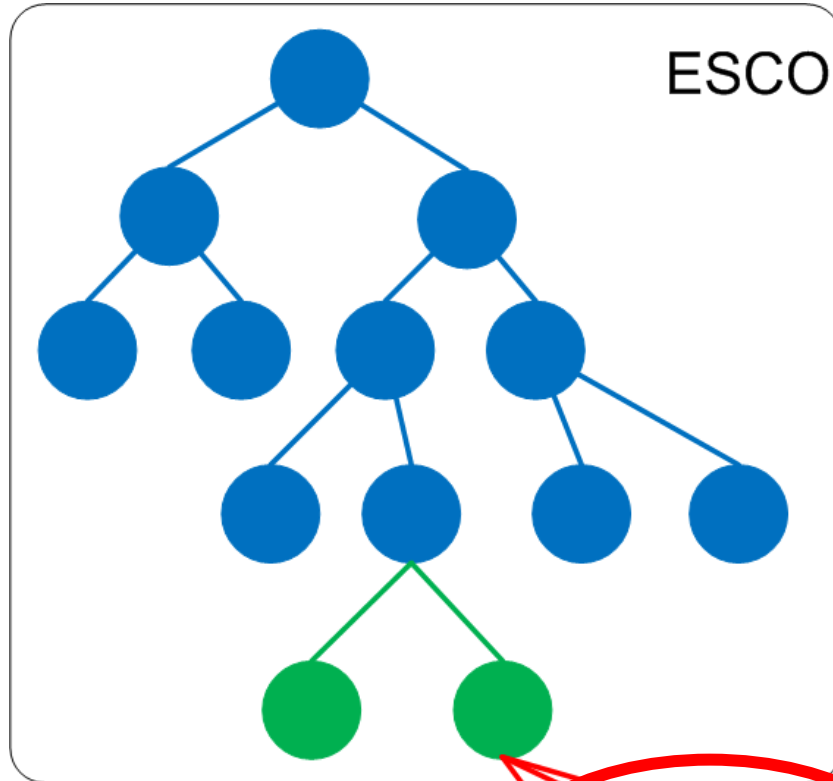
1 – INITIAL PROPOSAL
2 - MANDATORY REVIEW

II Business Mappings

Extending ISCO



Extending ISCO



ESCO

2. professionals

21. engineering

213. computing professionals

2132. Computer programmers

esco:requiredSkill

esco:recommendedSkill

esco:optionalSkill

data analyst (O)



Java programming (S)

II Business Mappings

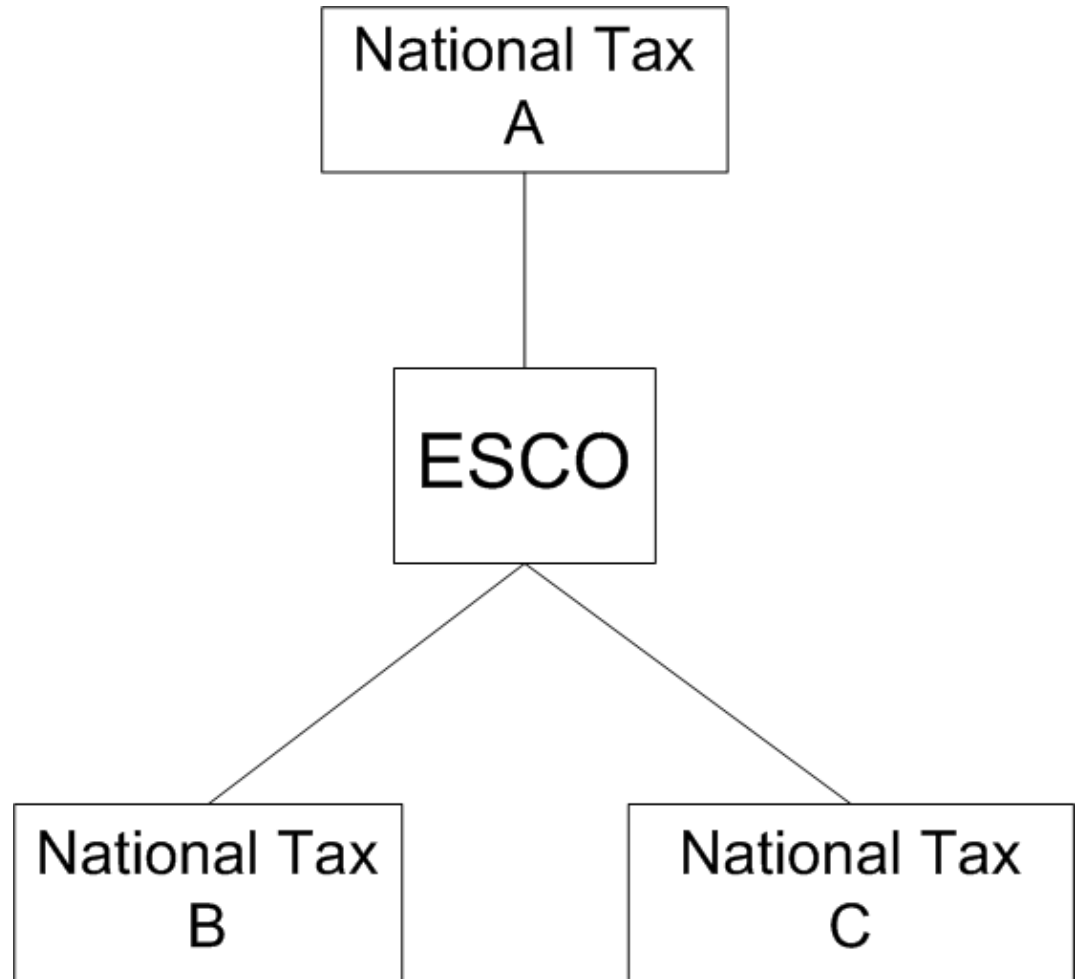


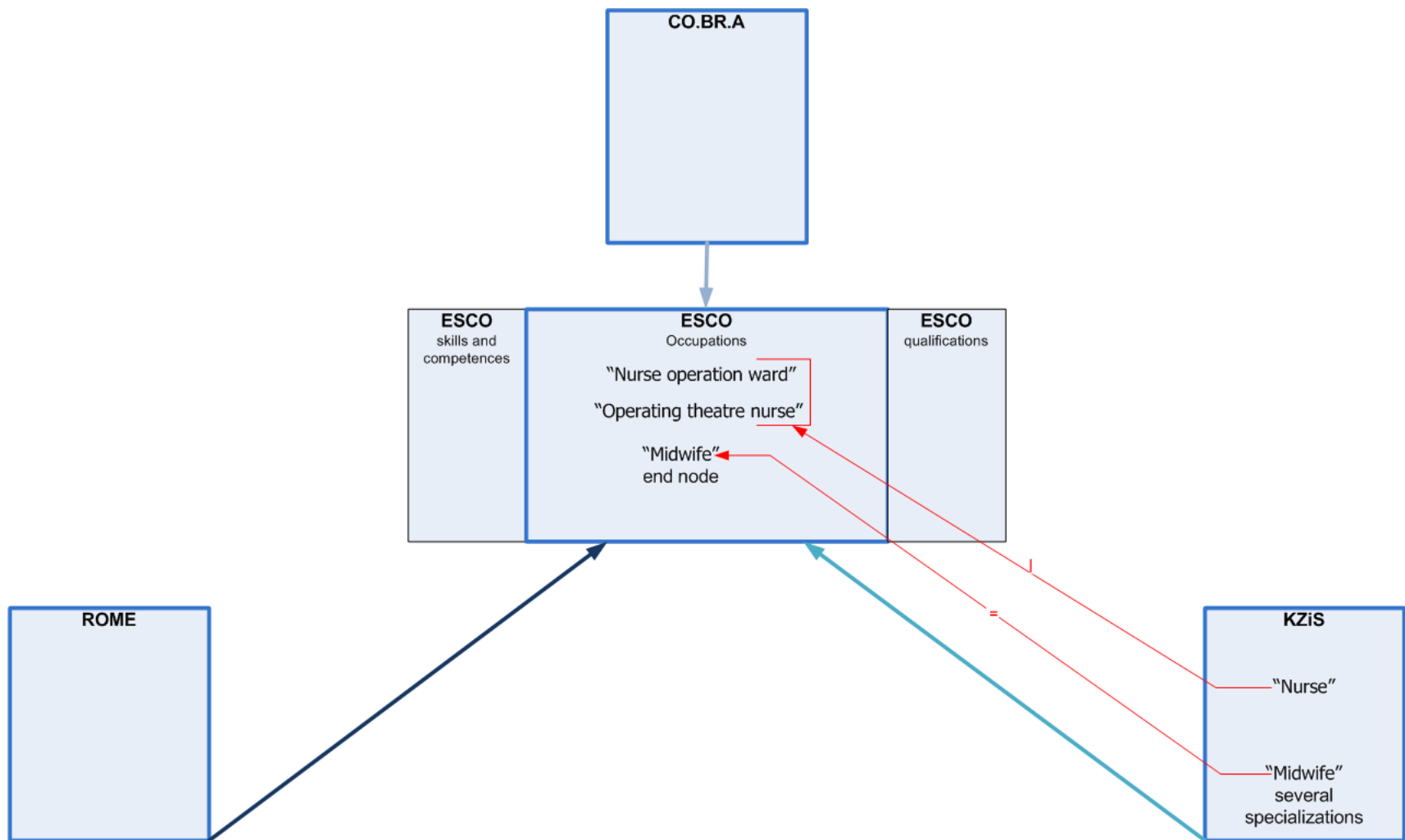
- Considerations
 - the mapping maintenance may be steered by the market
 - How do skills and occupations correlate statistically on the published vacancies
 - How do skills and competencies correlate statistically on the published CV

III. Compound Mappings



Result of mapping
= Hub-structure





The following **individual concept mappings, shown as red lines define**

- KCiS:"Nurse" matches

ESCO:"Nurse operation ward" | ESCO:"Operating theatre nurse"
 (KCiS is skos:broaderMatch of both)

- KZiS:"Midwife" matches

ESCO:"Midwife"

Compound mappings



- Considerations
 - compound mappings are difficult to maintain
 - The impact of different specializations has not been assessed yet