



GSEU

GEOLOGICAL SERVICE | FOR EUROPE

GSEU WP2 TRAIN-THE-TRAINER COURSE

Bridging Methodology

Level 2

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Bridging Methodology

- General Principles of Bridging
- Bridging the Czech National System to UNFC
- Bridging the ABC System to UNFC
- **Bridging the Austrian National System to UNFC**



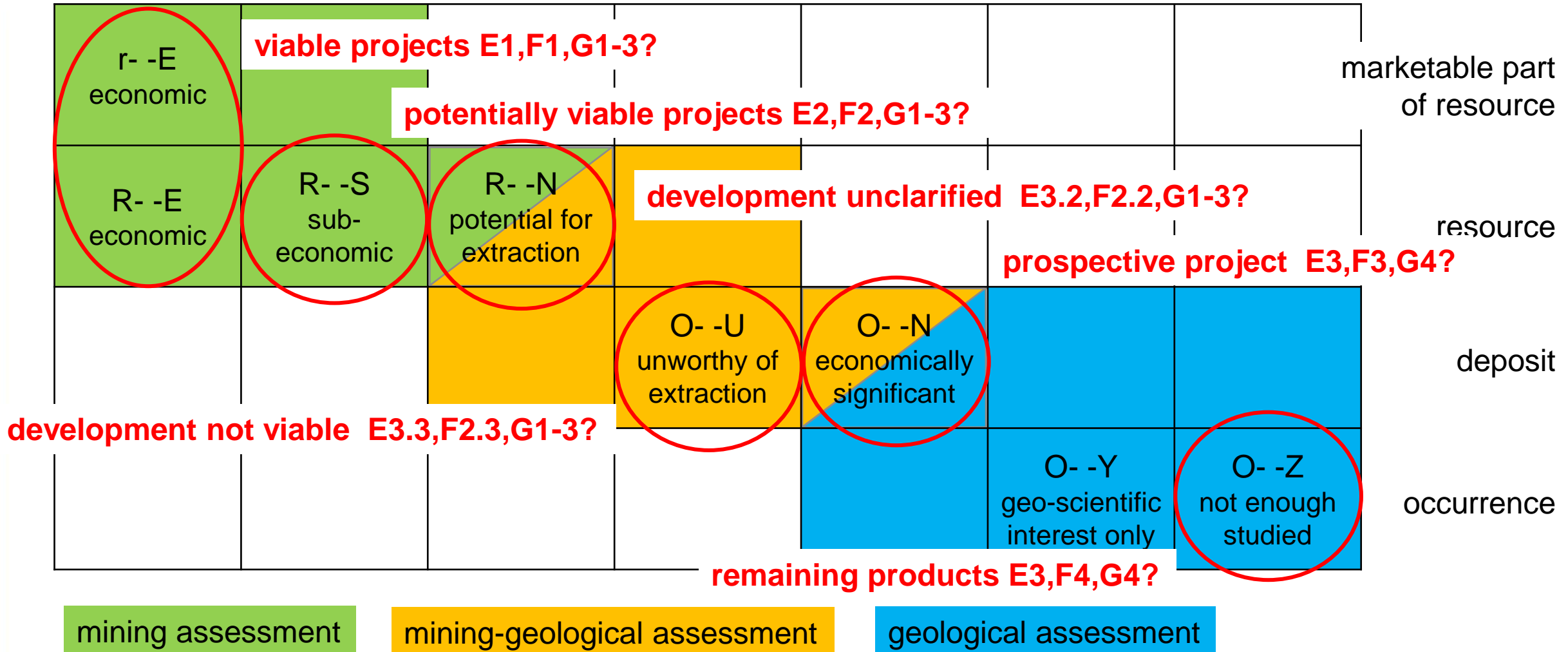
BRIDGING THE AUSTRIAN NATIONAL SYSTEM TO UNFC

Austrian Standard G 1050 “Classification of Resources and Occurrences for Solid Mineral Raw Materials”

- geological certainty (estimates are tentative / preliminary / reliable)
- level of assessment
 - geological assessment
 - only geo-scientifically significant
 - economic significance
 - mining-geological assessment
 - without potential of economic extraction in the foreseeable future
 - potential of economic extraction
 - mining assessment
 - currently not economic but with a potential in the foreseeable future (sub-economic)
 - economic resource
- economic usability
 - occurrence
 - resource including losses
 - marketable part of resource



BRIDGING THE AUSTRIAN NATIONAL SYSTEM TO UNFC





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Classes of geological certainty

G1, G2, G1+G2?

Class 1: reliable estimates: **1A certain (certainty 90% ± 20%) - 1B probable (90% ± 30%) - 1C indicated (90% ± 50%)**
(depending on data density)

low level of confidence, G3? outcrops, trenches, shafts, adits or drillings

Class 2: preliminary estimates: assumed by analogy to neighboring, similar deposits

volumes estimated on the basis of regional geology and some outcrops; needs further exploration

Class 3: tentative estimates: existence and size of speculative nature

volumes estimated on the basis of geological extrapolation, geophysical or geochemical indications
or statistical analogies

estimated on indirect evidence, G4?



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Thank you for your attention!

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- Classes of Assessment

mining assessment :

Class E: resource worthy of economic extraction

Class S: sub-economic resource (potentially economic in the foreseeable future)

Class N: resource not assessed
studies include market analysis

mining geological assessment :

Class U: deposit unworthy of economic extraction (i.e. not a resource)

Class N: deposit not assessed

studies consider socio-economic factors and legal, technical and economic conditions

geological assessment:

Class Y: occurrence of purely geo-scientific significance (i.e. not a deposit)

Class Z: occurrence not sufficiently investigated
studies investigate grades, depth, thickness



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- Classes of Economic Usability

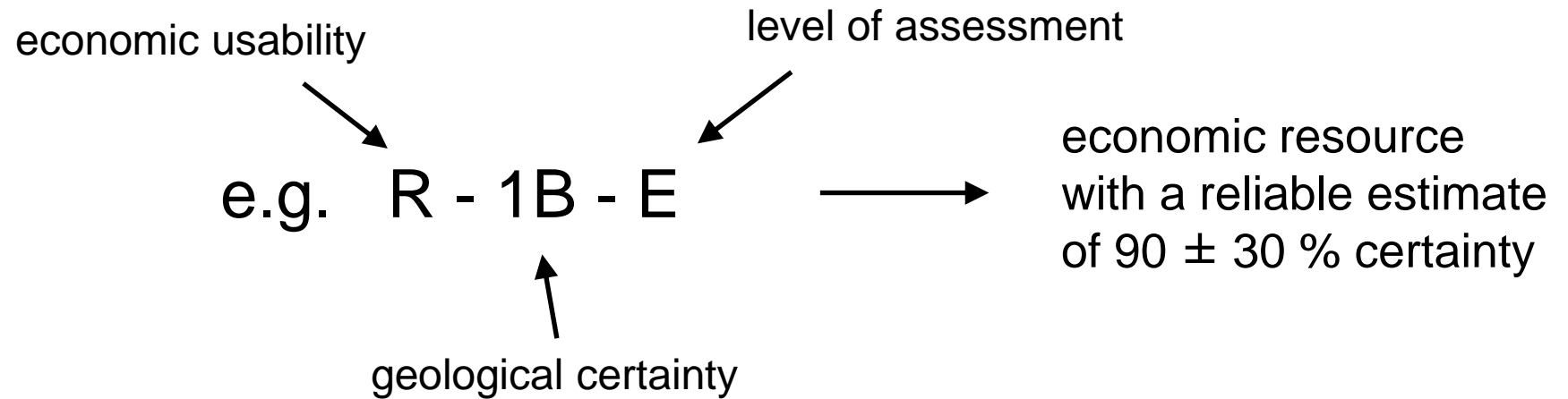
resources:	Classes r- -E:	marketable part of economic resource
	Classes R- -E:	total economic resource including products unused or consumed in operations
	Classes R- -S:	sub-economic resource
	Classes R- -N:	resource without mining assessment
occurrences:	Classes O- -U:	deposit unworthy of economic extraction (i.e. not a resource)
	Classes O- -N:	deposit not assessed
	Classes O- -Y, O- -Z:	natural mineralization



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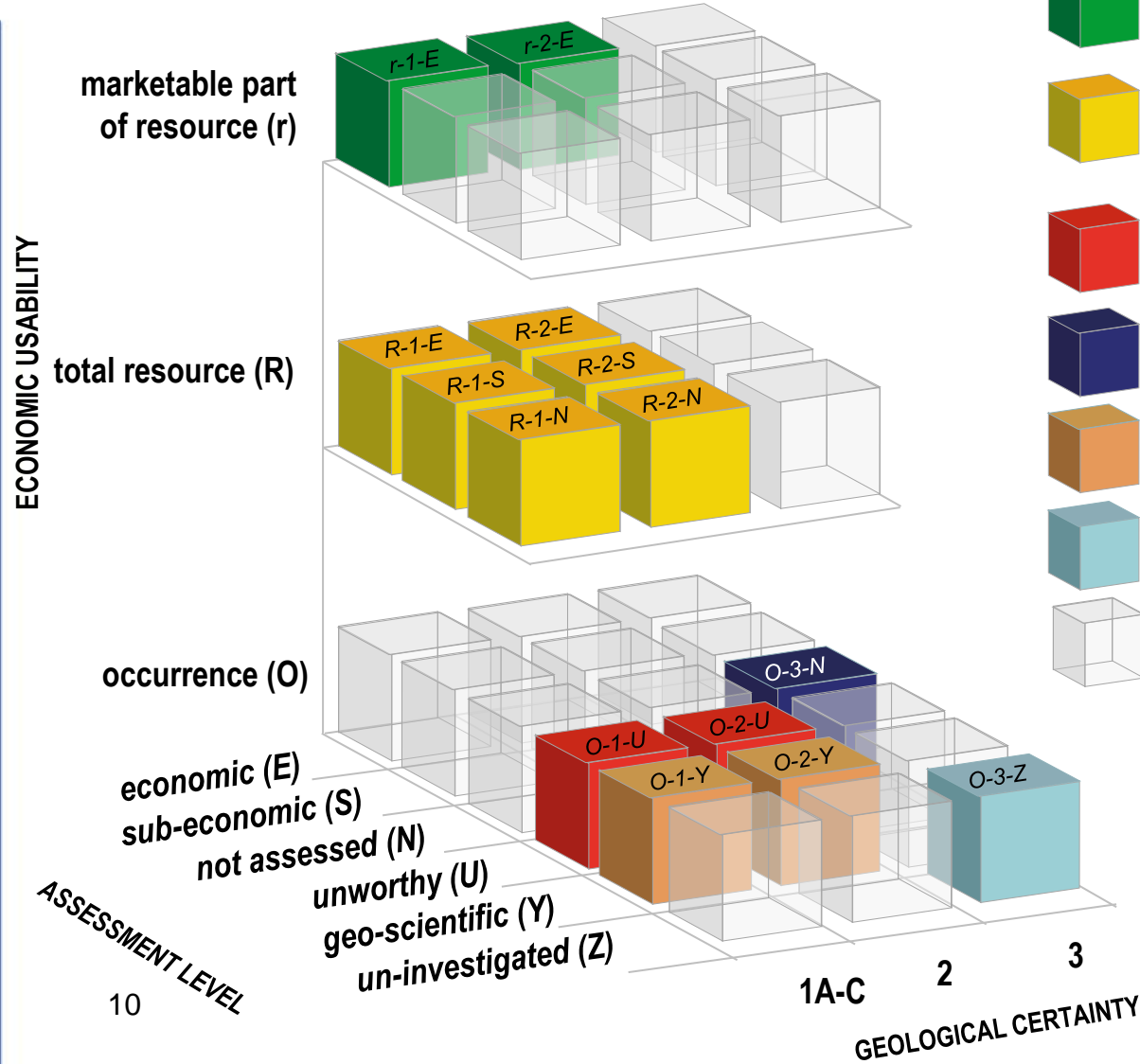
Austrian Standard G 1050 “Classification of Resources and Occurrences for Solid Mineral Raw Materials”

- Codification





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Austrian Standard G 1050 class type of UNFC project? UNFC class?

	marketable part of resource	r- -E	viable project	E1,F1,G1-3
	resource including products unused or lost during processing	R- -E	viable project	E1,F1,G1-3
		R- -S	potentially viable project	E2,F2,G1-3
		R- -N	non-viable project (development unclarified)	E3.2,F2.2,G1-3
	deposit without potential of economic extraction	O- -U	non-viable project (development not viable)	E3.3,F2.3,G1-3
	deposit, potential of economic extraction not assessed	O- -N	prospective project	E3,F3,G4
	occurrence with geo-scientific but no economic significance	O- -Y	remaining products not developed	E3,F4,G1-3
	occurrence not sufficiently investigated to assess economic significance	O- -Z	remaining products not developed	E3,F4,G4
	Other combinations			