

## Draft regional lists of Projects of Common Interest – Stakeholder Consultation at the Florence Forum on 16 May

### Background

In view of the European energy and climate policy objectives, the recently adopted Regulation on "Guidelines for trans-European energy infrastructure"<sup>1</sup> ("Regulation") identifies European infrastructure priorities until 2020 and beyond. It sets out 12 priority corridors and areas covering electricity, gas, oil and carbon dioxide transport networks and establishes a process to identify concrete projects of common interest (PCIs), comprising direct interconnections or internal lines with a cross-border impact on at least two Member States.

Regional working groups consisting of the representatives from ministries, national regulators, transmission system operators, project promoters and European Commission have assessed the submitted project proposals. The criteria for the assessment are set out in Article 4 of the Regulation.

Once identified, these projects are eligible to benefit from accelerated permit granting procedures, improved regulatory treatment and financial support.

Annex III, point 5 of the Regulation requires the regional groups to consult stakeholders, for which this spring's Florence Forum will provide a platform.

*In this context, this document reflects the state of play of the draft PCI lists on 30/04 and is without prejudice to further updates regarding the definition and content of the PCIs, particularly for projects to be further detailed.*

### Priority corridor Baltic Energy Market Interconnection Plan in electricity

Type of projects	No.	Countries directly involved	Description
<b>Transmission</b>	E 254 (60.A52) E 282 (60.385)	SE/LV	Sweden and Latvia internal reinforcements for interconnection LT/SE (NordBalt) <ul style="list-style-type: none"><li>• Internal reinforcements between Ekhyddan and Nybro/Hemsjö (SE)</li><li>• Internal reinforcements between Grobina and Imanta (LV)</li></ul>

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<sup>1</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32013R0347:EN:NOT>

	E 98 (62.386) E 281 (62.388)	EE/LV	Estonia – Latvia between Kilingi-Nõmme and Riga (3 <sup>rd</sup> interconnection) <ul style="list-style-type: none"> <li>Interconnection between Kilingi-Nõmme (EE) and Riga CHP2 substation (LV)</li> <li>Internal reinforcements between Harku and Sindi (EE)</li> </ul>
	E 96 (36.141)	DK/DE	Denmark – Germany between Ishøj/Bjæverskov and Bentwisch/Güstrow (Kriegers Flak) <ul style="list-style-type: none"> <li>Interconnection between Ishøj/Bjæverskov (DK) and Bentwisch/Güstrow (DE)</li> </ul>
	E 283 (59.376) E 201 (59.373) + E 204 (100.335) E 202 (59.374) E 203 (59.375)	LT/PL	Lithuania – Poland between Alytus (LT) and Elk (PL) <ul style="list-style-type: none"> <li>LT part of interconnection between Alytus (LT) and LT/PL border</li> <li>Internal reinforcements between Stanisławów and Olsztyn Mątki (PL)</li> <li>Internal reinforcements between Kozienice and Siedlce Ujrzanów (PL)</li> <li>Internal reinforcements between Płock and Olsztyn Mątki (PL)</li> </ul>
	194	LT/LV/EE	Lithuania – Latvia – Estonia power system and market integration <ul style="list-style-type: none"> <li>Synchronous interconnection of Lithuania, Latvia and Estonia with the Continental European networks</li> </ul>
<b>Storage</b>	97	EE	New hydro-pumped storage in Muuga (EE)
	300	LT	Capacity increase of hydro-pumped storage in Kruonis (LT)

#### Priority corridor Northern Seas Offshore Grid

Type of projects	No.	Countries directly involved	Description
<b>Transmission</b>	E 262 (74.449), E 263 (74.450), E 264 (74.443)	UK/BE	United Kingdom – Belgium between Canterbury and Zeebrugge <ul style="list-style-type: none"> <li>Interconnection between Zeebrugge (BE), Richborough and Canterbury (UK)</li> <li>Internal reinforcements between Sellindge and Dungeness (UK)</li> </ul>
	E 200 (110,424)	UK/NO	United Kingdom – Norway between Kvilldal and Blyth <ul style="list-style-type: none"> <li>Interconnection between Kvilldal (NO) and Blyth (UK)</li> </ul>
	E 154 (106.A34)	UK/IE	United Kingdom – Ireland between xxx <ul style="list-style-type: none"> <li>Interconnection between locations tbd in UK and IE</li> </ul>
	E 90 (43.A90)	DE/DK	Germany – Denmark between Niebüll and Endrup

			<ul style="list-style-type: none"> <li>• Interconnection between Niebüll DE and Endrup DK</li> <li>• Internal reinforcements between Brunsbüttel – Barlt – Heide – Husum - Niebüll (DE)</li> <li>• Internal reinforcements between Audorf – Kiel – Göhl – Siems – Lübeck - Kaltenkirchen (DE)</li> <li>• Internal reinforcements between Kaltenkirchen – Itzehoe - Brunsbüttel (DE)</li> <li>• <i>Transformers</i></li> </ul>
	E 198 (71.427)	NL/DK	Denmark - Netherlands between Endrup and Eemshaven <ul style="list-style-type: none"> <li>• Interconnection between Endrup (DK) and Eemshaven (NL)</li> </ul>
	Non-TYNDP E 156	IE/UK	Ireland – United Kingdom between Co. Offaly and Pembroke/Pentir <ul style="list-style-type: none"> <li>• Interconnection between Co. Offaly (IE), Pembroke and Pentir (UK)</li> </ul>
	Non-TYNDP E 261	UK/NO	United Kingdom – Norway between Peterhead and Sima/Samnanger <ul style="list-style-type: none"> <li>• Interconnection between Peterhead (UK) Sima or Samnanger (NO)</li> </ul>
	Non-TYNDP E 291	IE/UK	Ireland – United Kingdom between xxx <ul style="list-style-type: none"> <li>• Interconnection between Coolkeragh - Coleraine hubs (IE) and Hunterston station, Islay, Argyll and Location C OWFs (UK)</li> <li>• Interconnection between the Northern hub, Dublin and Codling Bank (IE) and Trawsfynydd and Pembroke (UK)</li> </ul>
	Non-TYNDP E 149a	IE/UK	Ireland – United Kingdom between North West Ireland and Midlands <ul style="list-style-type: none"> <li>• Interconnection between North West Ireland (IE) and Midlands (UK)</li> </ul>
	E 17 (75.A28)	BE	Belgium – grid-ready offshore platform for Northern Seas Offshore Grid <ul style="list-style-type: none"> <li>• Connection of grid-ready offshore platform to Zeebrugge (BE)</li> </ul>
	Non-TYNDP E 150a	IE/UK	Ireland – United Kingdom between Glinsk and Pembroke <ul style="list-style-type: none"> <li>• Interconnection between Glinsk, Mayo (IE) and Pembroke (UK)</li> </ul>
	Non-TYNDP E 304	IE/UK	Ireland – United Kingdom between xxx <ul style="list-style-type: none"> <li>• Interconnection between the Irish midlands and Pembroke (UK)</li> <li>• Interconnection between the Irish midlands and Alverdiscott, Devon (UK)</li> <li>• Interconnection between the Irish coast and Pembroke (UK)</li> </ul>
	E 69 (39.144)	DE/DK	Germany – Denmark between Audorf and Kassø <ul style="list-style-type: none"> <li>• Interconnection between Audorf (DE) and Kassø (DK)</li> </ul>
	E 199 (37.142)	NO/DE	Norway – Denmark between Tonstad and Wilster <ul style="list-style-type: none"> <li>• Interconnection between Tonstad (NO) and Wilster (DE)</li> </ul>

	Non-TYNDP E 319	FR/UK	France – United Kingdom between Cotentin and Exeter <ul style="list-style-type: none"> <li>Interconnection between Cotentin, Yvetot-Bocage (FR) and a substation in the vicinity of Exeter (UK)</li> </ul>
	E 137 (25.62)	UK/FR	United Kingdom – France between Tourbe and Lee-On-Solent area <ul style="list-style-type: none"> <li>Interconnection between Tourbe (FR) and Lee-On-Solent area (UK)</li> </ul>
	Non-TYNDP E 279	UK/FR	France - United Kingdom between Calais and Folkestone <ul style="list-style-type: none"> <li>Interconnection between Calais (FR) and Folkestone (UK)</li> </ul>
<b>Storage</b>			
	149b	IE	New hydro-pumped storage in North West Ireland (IE)
	150b	IE	New hydro-pumped (seawater) storage in Glinsk (IE)
	151	UK	New compressed air energy storage in Larne (UK)

#### Priority corridor: North-South electricity interconnections in Western Europe

Type of projects	No.	Countries directly involved	Description
<b>Transmission</b>	E 128 (5.37)	ES/FR	Spain - France between Vic and Gaudière <ul style="list-style-type: none"> <li>Internal reinforcements between Santa Llogaia and Bescanó (ES)</li> <li>New substations in Bescanó, Ramis and Santa Llogaia (ES)</li> </ul>
	E 129 (16.A17), E 132 (16.38)	ES/FR	Spain – France between Gatica and Aquitaine <ul style="list-style-type: none"> <li>Interconnection between Gatica (ES) and Aquitaine (FR)</li> <li>Coordinated installation and operation of PST on Arkale-Argia interconnection line (ES)</li> </ul>
	E 155 (81.462)	UK/IE	United Kingdom – Ireland between Turleenan and Woodland <ul style="list-style-type: none"> <li>Interconnection between Turleenan (UK) and Woodland (IE)</li> </ul>
	E 222 (1.2), E 223 (1.3), E 225 (1.4)	PT/ES	Portugal reinforcements at PT/ES border <ul style="list-style-type: none"> <li>Internal reinforcements between Alfena, Pedralva and Vila Fria (PT)</li> <li>Internal reinforcements between Frades B, Ribeira de Pena, Feira (PT)</li> </ul>

	Non-TYNDP E 130	ES/UK	Spain - United Kingdom between Gatica and Indian Queens <ul style="list-style-type: none"> <li>• Interconnection between Gatica (ES) and Indian Queens (UK)</li> </ul>
	Non-TYNDP, 131a	ES/UK	Spain - United Kingdom between Mougas and Plymouth <ul style="list-style-type: none"> <li>• Interconnection between Mougas (ES) and Plymouth (UK)</li> </ul>
	Non-TYNDP, 278	UK/ES/FR	Spain – United Kingdom - France between Gatica, Indian Queens and Cordemais <ul style="list-style-type: none"> <li>• Interconnection between Gatica (ES), Indian Queens (UK) and Cordemais (FR)</li> </ul>
	<i>E 19 (92.146)</i>	BE/DE	Germany - Belgium between Aachen/Düren region and Lixhe <ul style="list-style-type: none"> <li>• Interconnection between Aachen/Düren region (DE), Herderen and Lixhe (BE)</li> <li>• Internal reinforcements (installation of transformer) in Limburg (BE)</li> </ul>
	E 88 (43.A81), E 89 (43.A88)	DE	Germany capacity increase at the Western and Northern borders <ul style="list-style-type: none"> <li>• Internal reinforcements between Osterath and Philippsburg (DE)</li> <li>• Internal reinforcements between Brunsbüttel, Wilster, Kaltenkirchen and Großgartach, Goldshöfe, Grafenrheinfeld (DE)</li> </ul>
	E 152 (82.463)	IE/UK	Ireland - United Kingdom between Srananagh and Turleenan <ul style="list-style-type: none"> <li>• Interconnection between Srananagh (IE) and Turleenan (UK)</li> </ul>
	E 92(90.136)	DE/CH/AT	Germany – Switzerland – Austria capacity increase in the Bodensee area <ul style="list-style-type: none"> <li>• Internal reinforcements between Herbertingen and Tiengen (DE)</li> <li>• Internal reinforcements between Herbertingen and Pkt. Rommelsbach (DE)</li> <li>• Interconnection between Herbertingen (DE), Meiningen (AT) and Rüthi (CH)</li> <li>• Internal reinforcements between Pkt. Wullenstetten and Pkt. Niederwangen (DE)</li> </ul>
	E 5 (47.219)	AT	Austria capacity increase at AT/DE border <ul style="list-style-type: none"> <li>• Internal reinforcements between Westtirol and Zell-Ziller (AT)</li> </ul>
	E 182 (34.A100)	IT/FR	Italy – France between Codrongianos, Corse and Suvereto <ul style="list-style-type: none"> <li>• Interconnection between Codrongianos and Suvereto (IT) (via Corse/FR)</li> </ul>
	E 230 (4.18)	PT/ES	Spain - Portugal between Boboras - O Covelo and Vila Fria - Vila do Conde – Recarei <ul style="list-style-type: none"> <li>• Interconnection between Boboras - O Covelo (ES) and Vila Fria - Vila do Conde – Recarei (PT)</li> </ul>
	E 93 (103.145)	DE/NL	Germany – Netherlands between Niederrhein and Doetinchem <ul style="list-style-type: none"> <li>• Interconnection between Niederrhein (DE) and Doetinchem (NL)</li> </ul>

	E 133 (21.55), E 172 (21.81)	IT/FR	Italy – France between Grande Ile and Piosasco <ul style="list-style-type: none"> <li>• Interconnection between Grande Ile (FR) and Piosasco (IT)</li> <li>• Internal reinforcements between Trino and Lacchiarella (IT)</li> <li>• Reinforcements in Magenta substation (IT)</li> </ul>
	E 197 (40.A29)	LU/BE or FR	Luxembourg – Belgium/France capacity increase at the LU/BE/FR border <ul style="list-style-type: none"> <li>• Interconnection between Bascharage or Schiffange (LU) and/or Aubange (BE) and/or Moulaine (FR)</li> </ul>
	Non-TYNDP E 187	IT/CH	Italy – Switzerland between Thusis/Sils and Verderion Inferiore <ul style="list-style-type: none"> <li>• Interconnection between Thusis/Sils (CH) and Verderion Inferiore (IT)</li> </ul>
	E 178, E 179, E 186	IT/CH	Italy – Switzerland capacity increase at the IT/CH border <ul style="list-style-type: none"> <li>• Internal reinforcements between Tirano and Verderio (IT)</li> <li>• Internal reinforcements between Pavia and Piacenza (IT)</li> <li>• Interconnection between Milan area (IT) and All’Acqua (CH)</li> </ul>
<b>Storage</b>			
	131b	ES	New hydro-pumped (seawater) storage in Mougas (ES)
	303	AT	Capacity increase of hydro-pumped storage in Kaunertal, Tyrol (AT)
	12	AT	New hydro-pumped storage in Obervermuntwerk II, Vorarlberg province (AT)
	6	AT	Capacity increase of hydro-pumped storage in Limberg III, Salzburg (AT)
	318		New hydro-pumped storage in Molln (AT)
	9	DE /AT border	New hydro-pumped storage in Riedl (DE)

**Priority corridor: North-South electricity interconnections in Central Eastern and South Eastern Europe**

Type of project	No.	Countries directly involved	Description
<b>Transmission</b>	E 138 (27.227), E 139 (27.A105), E 140 (27.A106)	HR/BA	Croatia – Bosnia and Herzegovina between Lika and Banja Luka <ul style="list-style-type: none"> <li>• Interconnection between Lika (HR) and Banja Luka (BA)</li> <li>• Internal reinforcements between Brinje, Lika, Velebit and Konjsko (HR)</li> </ul>
	E 159 (27.92), E 189 (27.68)	IT/SI	Italy – Slovenia between West Udine and Okroglo <ul style="list-style-type: none"> <li>• Interconnection between West Udine (IT) and Okroglo (SI)</li> <li>• Internal reinforcements between West Udine and Redipuglia (IT)</li> </ul>
	E 190 (27.A96)	IT/SI	Italy – Slovenia between Salgareda and Divača <ul style="list-style-type: none"> <li>• Interconnection between Salgareda (IT) and Divača(SI)</li> </ul>
	E 256 (27.223), E 257 (27.225)	SI/HU/HR	Slovenia – Hungary – Croatia between Cirkovce and Heviz/ Žerjavenec <ul style="list-style-type: none"> <li>• Interconnection between Cirkovce (SI) and Heviz (HU)/ Žerjavenec (HR)</li> <li>• Internal reinforcements between Divača, Klece, Bericevo, Podlog and Cirkovce (SI)</li> </ul>
	Non-TYNDP E 30	CY/IL/EL	Israel – Cyprus – Greece between Hadera and Attica region (Euro Asia Interconnector) <ul style="list-style-type: none"> <li>• Interconnection between Hadera (IL), Vasilikos (CY) and Korakia, Crete (EL)</li> <li>• Internal reinforcements between Korakia, Crete and Attica region (EL)*</li> </ul>
	E 4 (26.218), E 16 (26.63), E 157 (26.83),	IT/AT	Italy – Austria between Veneto region and Lienz <ul style="list-style-type: none"> <li>• Interconnection between Veneto region (IT) and Lienz (AT)</li> <li>• Internal reinforcements between Lienz and Obersielach (AT)</li> <li>• Internal reinforcements between Volpago and North Venezia (IT)</li> </ul>
	E 167 (26.A102)	IT/AT	Italy – Austria between Milan region and Nauders <ul style="list-style-type: none"> <li>• Interconnection between Milan region (IT) and Nauders (AT)</li> </ul>
	E 143 (28.A114), E 160 (28.70), E 161 (28.89), E 168 (28.86)	IT/ME	Italy – Montenegro between Villanova and Lastva <ul style="list-style-type: none"> <li>• Interconnection between Villanova (IT) and Lastva (ME)</li> <li>• Internal reinforcements between Fano and Teramo (IT)</li> <li>• Internal reinforcements between Foggia and Villanova (IT)</li> <li>• Coordinated installation and operation of a phase shifting transformer in Villanova (IT)</li> </ul>
	E 94 (58.140), E 212 (58.353), E	DE/PL	Germany – Poland between Eisenhüttenstadt and Plewiska (GerPol Power Bridge) <ul style="list-style-type: none"> <li>• Interconnection between Eisenhüttenstadt (DE) and Plewiska (PL)</li> </ul>

	213 (58.355)		<ul style="list-style-type: none"> <li>• Internal reinforcements between Krajnik and Baczyna (PL)</li> <li>• Internal reinforcements between Mikułowa and Świebodzice (PL)</li> </ul>
	E 95 (94.139)  <i>E217/218(94.A70/A68, 94.A71/A69)</i>	DE/PL	Germany – Poland between Vierraden and Krajnik <ul style="list-style-type: none"> <li>• Interconnection between Vierraden (DE) and Krajnik (PL)</li> <li>• <i>Coordinated installation and operation of phase shifting transformers in xx (PL)</i></li> </ul>
	E 236 (53.273), E 238 (53.275), E 239 (53.276), E 23 (95.A119), E 24 (95.265), E 27 (95.266)	BG/RO	Bulgaria – Romania capacity increase <ul style="list-style-type: none"> <li>• Internal reinforcements between Cernavoda and Stalpu (RO)</li> <li>• Internal reinforcements between Gutinas and Smardan (RO)</li> <li>• Internal reinforcements between Gadalin and Suceava (RO)</li> <li>• Internal reinforcements between Dobrudja and Burgas (BG)</li> <li>• Internal reinforcements between Vidno and Svoboda (BG)</li> </ul>
	E 67 (43.A75), E 59 (45.191), E 60 (45.200)	DE	Germany capacity increase at Eastern borders <ul style="list-style-type: none"> <li>• Internal reinforcements between Lauchstadt and Meitingen (DE)</li> <li>• Internal reinforcements between Neuenhagen and Vierraden (DE)</li> <li>• Internal reinforcements between Halle/Saale and Schweinfurt (DE)</li> </ul>
	E 20 (51.257), E 21 (51.258), E 22 (51.262), E 125 (51.256)	EL/BG	Greece – Bulgaria between N. Santa and Maritsa East 1 <ul style="list-style-type: none"> <li>• Interconnection between N. Santa (EL) and Maritsa East 1 (BG)</li> <li>• Internal reinforcements between Maritsa East 1, Plovdiv and Burgas (BG)</li> <li>• Internal reinforcements between Maritsa East 1 and Maritsa East 3 (BG)</li> </ul>
	E 1 (47.216), E 2 (47.221), E 14 (47.212)	AT/DE	Austria - Germany between St. Peter and Isar <ul style="list-style-type: none"> <li>• Interconnection between St. Peter (AT) and Isar (DE)</li> <li>• Internal reinforcements between St. Peter and Tauern (AT)</li> <li>• Internal reinforcements between St. Peter and Ernstshofen (AT)</li> </ul>
	E 231 (50.238), E 232 (50.269), E 233 (50.270)	RO/RS	Romania – Serbia between Resita and Pancevo <ul style="list-style-type: none"> <li>• Interconnection between Resita (RO) and Pancevo (RS)</li> <li>• Internal reinforcements between Portile de Fier and Resita (RO)</li> <li>• Internal reinforcements between Resita, Timisoara, Sacalaz and Arad (RO)</li> </ul>
	<i>Non-TYNDP E 126</i>	BG	<i>Bulgaria internal reinforcements for capacity increase with Romania and Greece</i> <ul style="list-style-type: none"> <li>• <i>Internal reinforcements between Vetren and Blagoevgrad (BG)</i></li> <li>• <i>Internal reinforcements between Tsarevets and Plovdiv (BG)</i></li> </ul>



	E 145 (48.A128), E 147 (48.214) – Non-TYNDP E280, E 258 (48.298)	SK/HU	Slovakia - Hungary between Gabčíkovo and Gőnyű <ul style="list-style-type: none"> <li>• Interconnection between Gabčíkovo (SK) and Gőnyű (HU)*</li> <li>• Internal reinforcements between Velký Ďur and Gabčíkovo (SK)</li> <li>• Upgrade of substation in Győr (HU)</li> </ul>
	E 144 (48.A127), E 148 (48.A126),	SK/HU	Slovakia – Hungary between Rimavská Sobota and Sajóvánka <ul style="list-style-type: none"> <li>• Interconnection between Rimavská Sobota (SK) and Sajóvánka (HU)</li> </ul>
	E 146 (54.A127), E 285 (54.294)	SK/HU	Slovakia - Hungary between Velké Kapušany and Kisvárda area <ul style="list-style-type: none"> <li>• Interconnection between Velké Kapušany (SK) and Kisvárda area (HU)</li> <li>• Internal reinforcements between Lemešany and Velké Kapušany (SK)</li> </ul>
	E 31 (35.137), E 32 (35.306), E 33 (35.307), E 34 (35.308), E 35 (35.309), E 36 (35.311), E 37 (35.312), E 38 (35.313), E 39 (35.314), E 40 (35.315), E 41 (35.316)	CZ/DE	Czech Republic – Germany between Vitkov and Mechlenreuth <ul style="list-style-type: none"> <li>• <i>Interconnection between Vitkov (CZ) and Mechlenreuth (DE)</i></li> <li>• Internal reinforcements between Vernerov, Vitkov, Prestice, Kocin, Mirovka and Cebin (CZ)</li> </ul>
	E 58 (35.138), Non-TYNDP E 52	CZ/DE	Czech Republic – Germany between Hradec and Roehrsdorf <ul style="list-style-type: none"> <li>• <i>Interconnection between Hradec (CZ) and Roehrsdorf (DE)</i></li> <li>• <i>Coordinated installation and operation of a phase shifting transformer in Hradec (CZ)</i></li> </ul>
	Non-TYNDP E 15	AT/IT	Austria – Italy between Wurmlach and Somplago <ul style="list-style-type: none"> <li>• Interconnection between Wurmlach (AT) and Somplago (IT)</li> </ul>
	Non-TYNDP E 320a	IT/HR/BA	Italy - Croatia - Bosnia and Herzegovina between Pescara, Split, Konjsko and Livno <ul style="list-style-type: none"> <li>• <i>Interconnection between Livno (BA), Konjsko (HR), Split (HR) and Pescara (IT)</i></li> </ul>
<b>Storage</b>	306	PL	New hydro-pumped storage in Mloty (PL)
	28	BG	New hydro-pumped storage in Yadenitsa (BG)
	114	EL	New hydro-pumped storage in Amfilochia (EL)

	171	IT	New storage systems (batteries) in Central South Italy
	<i>320b</i>	<i>BA</i>	<i>New hydro-pumped storage in xx (BA)</i>

**Priority thematic area: Smart Grids**

<b><i>Smart Grid</i></b>	<i>Non-TYNDP</i>	<i>UK/IE</i>	North Atlantic Green Zone Project: Lower wind curtailment by implementing communication infrastructure, enhance grid control and establishing (cross-border) protocols for Demand Side Management
	<i>Non-TYNDP</i>	<i>FR/IT</i>	Green-Me: Enhance RES integration by implementing automation, control and monitoring systems in HV and HV/MV substations, advanced communicating with the renewable generators and storage in primary substations

Legend:

\* competing projects

*Italic:* projects to be further detailed