

BALTIC ENERGY MARKET INTERCONNECTION PLAN

- 3rd progress report –

I. INTRODUCTION

1. BACKGROUND

In October 2008 European Commission President Barroso, following the agreement of the Member States of the Baltic Sea Region, has decided to set up a High Level Group (HLG) chaired by the Commission on Baltic Interconnections. Participating countries are Finland, Estonia, Latvia, Lithuania, Poland, Germany, Denmark, Sweden and, as an observer, Norway. The HLG delivered the Baltic Energy Market Interconnection Plan (BEMIP), a comprehensive Action Plan on energy interconnections and market improvement in the Baltic Sea Region in June 2009, with clear steps to be taken in the field of electricity. This plan was endorsed by the eight EU Member State Heads of State and President Barroso on June 17th. The plan requires also further work in the field of gas as no action plan was agreed.

The Commission has been requested to monitor progress of the Plan's implementation and present a report to the High Level Group twice during the first year and yearly during the following years of implementation. The report should be based on verifiable information provided by the implementing parties and other relevant stakeholders. This progress report may also be presented to the Energy Council after discussions with the High Level Group.

2. OBJECTIVES

The main objectives of this progress report are to describe the expected and actual status of actions and projects in terms of activities and timeline, to identify issues and difficulties encountered by the projects during implementation and to identify those that need to be further discussed with the HLG. The report will also touch upon changes in the external environment that are relevant for the BEMIP.

II. PROGRESS TO DATE

1. SUMMARY

ELECTRICITY

Connecting the three Baltic States to neighbouring EU countries and the internal market is now the main priority of the BEMIP Action Plan. This priority requires the full implementation of the internal market rules in order to enable the three Baltic States to participate into the EU market. The Action Plan identified the needed interconnections. The BEMIP priority interconnections are progressing according to the plan and are financially supported by the European Energy Programme for Recovery (EEPR). In December 2010, several contracts have been awarded for the design, supply and commission of cables and converter stations for the Nordbalt (Sweden-Lithuania-Latvia) and Estlink2 (Finland-Estonia) projects. The total amount of these contracts is about €710 million, of which €231 million are financed by the EEPR. There is also fast progressing development plans for wind generation in several BEMIP countries.

The milestones of the roadmap agreed for the full implementation of the internal market rules have been reached but there is now a need to solve the implementation of the 3rd energy market package in the three Baltic States which are part of the Russian UPS IPS system. A reflection paper on "Electricity market and operating Baltic electricity grid" (see Annex 3) has been proposed by the Commission and discussed with the Member States concerned. The paper addresses the issues of market development and system operation and it concludes that these issues need to be solved through direct negotiations between EU and Russia and Belarus. The rules for trading electricity with Third Countries have also been extensively discussed by the HLG.

A High Level taskforce on "nuclear power generation" was set up to strengthen support for the new nuclear plant in Lithuania. The HLTF provided its first interim report to the BEMIP HLG in December 2010.

GAS

Work in the gas sector which had not been completed in the Action Plan of June 2008 led finally to a comprehensive Action Plan delivered at the end of 2010 and covering the West Baltic area as a first step. It addresses the issue of the rapid depletion of the Danish gas fields and diversification of routes and sources of supply involving Poland, Germany, Denmark and Sweden and possibly Norway.

On the Eastern side of the Baltic Sea, the key question was to end the gas island situation of the three Baltic States and Finland. Several exchanges and discussions are still ongoing on the conditions to create a regional LNG terminal and the possible interconnections between Finland and Estonia and between Lithuania and Poland. Solutions require a very close cooperation of the Member States concerned and their willingness to share an infrastructure which would be a game changer in the area. Commission submitted a reflection Paper setting out the strategic options and recommendations on infrastructure investment, cost allocation and a common entry-exit model in the East Baltic Gas Market. Nevertheless, even after in-depth analyses and exchanges of information at technical and political levels there are still several proposed LNG terminal projects (at least one per Member State) and there is no agreement yet on one regional LNG project for the East Baltic region

2. EXTERNAL ENVIRONMENT OF THE BEMIP

The external environment of the BEMIP covers initiatives and events that fall outside of scope but may have an impact on the list of actions and projects and on achievable progress. These have been followed closely.

Energy policy

• European Energy Programme for recovery (EEPR): all projects in the Baltic region that applied for EEPR funding have received positive Commission decisions. For electricity, the projects are: EstLink2 (EC contribution up to €100M), Nordbalt and strengthening the Latvian network (EC contribution up to €175M) and Kriegers Flak (EC contribution up to €150M); for gas: strengthening of the Danish gas network (EC contribution up to €100M), strengthening of the Polish gas network (EC contribution up to €50M), Swinoujscie LNG terminal (EC contribution up to €80M), reverse flow between Lithuania and Latvia (EC contribution up to €12.94M), reverse flow in Poland (EC contribution up to €14.4M). Positive individual Commission Decisions and/or Grant Agreements were notified to the beneficiaries and the Member States concerned in 2010.

Projects where issues have been identified:

The Danish gas project has encountered some difficulties as its implementation is linked to a corresponding investment in Germany;

the Kriegers Flak project is progressing slowly the Swedish part of the project is frozen and next major step is the support of the political decision-making process in Denmark concerning the realization and the size of Kriegers Flak III (Danish part of the project).

Impact on BEMIP: EEPR is considered as a driver for the timely implementation of the projects. A close monitoring of the progress of all financed projects has to be performed and intervention may be needed.

• Trans European Energy Networks (TEN-E) programme: for the 2011 call the Commission has received twelve applications from the region for the TEN-E funding. The applications concerns projects in both electricity and gas sector. The evaluation process has been completed; the Commission will submit to the TEN Financial Committee its proposal to award funds in July 2011.

The following projects were selected to get support under the 2010 TEN-E budget:

- Feasibility study on interconnection variants for the integration of the 3 Baltic States to EU internal Electricity Market (by the three TSOs: LITGRID (LT), Augstsprieguma tikls (LV), Elering OÜ (EE). TEN-E max support: 950,000 €.
- Studies regarding the 3rd electricity interconnection between Poland (Poznan Region) and Germany (Eisenhuttenstadt) together with the necessary reinforcement of the Western part of the Polish Power System (by PSE Operator (PL)). TEN-E max support: 1,249,638 €.
- Lithuanian LNG solution: "Storage in Lithuania Phase 2" (by Exmar Marine). TEN-E max support: 550,000 €.
- "Study: Identification of the business case and feasibility study for the Gas Interconnection Poland-Lithuania " (by "Lietuvos Dujos" (LT), GAZ-SYSTEM S.A. (PL). TEN-E max support: 425,000 €

• Energy infrastructure legislative proposal

On November 17th 2010, the Commission adopted the Communication on Energy Infrastructure priorities for 2020 and beyond – A blueprint for integrated European energy networks. The Communication outlined the strategy for the new infrastructure policy and proposed a toolbox to ensure timely implementation of projects of European interest. BEMIP is one of the main regional initiatives. The 4th of February 2011 European Council and the 28th of February TTE Council confirmed the priorities identified in the Communication and supported the general approach for a new energy infrastructure policy proposed by the Commission. In October 2011, the Commission intend to propose an energy infrastructure legislative proposal, addressing the priorities, a new selection method for projects of common interest as well as the toolbox necessary for their implementation, including measures with regard to permit granting and public consultation, regulation and cost allocation, market-based and a range of financing mechanisms including, if necessary, direct EU financing.

Impact on BEMIP: the priority given to the BEMIP process is confirmed for the period up to 2020 with a major objective of terminating the isolation of the energy islands like the three Baltic States by 2015.

• EU coordinators

The signing of the Memorandum of Understanding in December 2010 by the North Seas Countries' Offshore Grid Initiative represented a major progress towards addressing the issues surrounding the need for a European transmission network linking the future offshore parks in the North and Baltic Seas.

Work of the European coordinator appointed for the LitPollink progresses according to schedule. LitPol Link prepared a localisation study for the Polish side with a few possible variants of the route for the line, with territorial and environmental descriptions of the proposed options. On the Lithuanian side, the Environmental Impact Assessment is completed the preparation of territorial planning (Special plan) procedures and documents for the 400 kV overhead power transmission line between Alytus substation – border of the Republic of Poland are at the final stage. The preparation of feasibility study, technical documentation and territorial planning for reconstruction and extension of the Alytus substation with a back-to-back converter station is completed On the Polish side, the preparation of the report on the Environmental Impact Assessment together with the bio-diversity investigation for the construction of the 400 kV connection Ełk – Republic of Poland's border and the reconstruction of the Ełk substation is in progress. The Trans-boundary Environmental Impact Assessment for the project was conducted and successfully completed. The financial and operational model for the project is at the final stage of preparation. The procurement of a company, which will be responsible for the construction permit for the 400kV line as well as the Terms of Reference for Ełk station are at their final stage.

For the power link between Germany and Poland, both operators (50Hz and PSE-Operator) signed in March 2011 a General Agreement to establish the project structure for the construction of a third interconnection connecting their networks, known as GerPol PowerBridge.

Regulation 994/2010 on security of gas supply

The Regulation (EU) 994/2010 concerning measures to safeguard security of gas supply entered into force on 2nd December 2010. It is particularly relevant to address the security of supply challenges of the three Baltic States, as witnessed in June 2010 when a disruption of gas supply affected the Belarus transit to Lithuania. This highlight the importance of a close cooperation between the three Baltic States. As a first step in the implementation, Competent Authorities were identified (in Estonia, the Estonian Competition Authority, in Latvia, the Ministry of Economics and in Lithuania the Ministry of Energy) and public service obligations were published on the Internet.

The "Focus Group on Regional Cooperation" - established within the framework of the BEMIP to streamline the establishment of national and joint Risk Assessments, Preventive Action Plans and Emergency Plans on regional level – met three times in 2010 and twice in 2011. As a result of its work, national Risk Assessments have been prepared and the drafting of the regional Risk Assessment started in the first quarter of 2011. Latvia is steering this process and the regional Assessment is planned to be finalized in the first half of 2011.

Impact on the BEMIP: The Risk Assessment is helpful in identifying common threats and hazards, which can later be tackled in a harmonized way defined in the joint Plans. This exercise also helps to identify internal bottlenecks in gas infrastructure and to foster solutions at technical level with the participation of ministries, regulators and industry.

• Political declarations

The energy Ministers of the 3 Baltic States and Poland met Commissioner Oettinger on December 2nd 2010. They reaffirmed their joint support to the implementation of the BEMIP, the Visaginas NPP. Conclusions: The participants confirmed their commitment to timely implementation of the BEMIP and the commitment to the long-term objective of synchronous interconnection of the Baltic States. The participants reaffirmed their joint support for the implementation of the regional nuclear power plant in Lithuania. The three Baltic States committed to develop and implement common policy measures concerning trading principles towards non EEA third countries. Furthermore participants committed to the correct and timely implementation of the third internal energy market package. Finland's participation is relevant for the discussions on electricity imports, as well as on gas projects in the East-Baltic area.

• Member States energy policies

Lithuania published in October 2010 its National Energy Strategy. The main goal of the Strategy is Lithuania's energy independence before year 2020. The Strategy outlines a number of initiatives to be achieved in the fields of electricity, heating, gas, oil, renewable energy and energy efficiency, focusing on implementation of strategic projects which have crucial impact on ensuring the country's energy independence.

In implementing the third internal energy package, the choice of ownership unbundling made by the Lithuanian government has created major discussions in the region and a strong reaction of the concerned companies echoed by Russian Federation. Solutions have to be found to ensure a smooth transition from the present situation to the objective set by the Lithuanian government and planned new

infrastructures will play a major role to enable the development of the gas market in Lithuania and in the whole region.

Russian aspects

• EU-Russia Energy Dialogue

Discussions between Russia and the EU have been ongoing intensively at multiple levels – the regular meetings of the Thematic Groups of the Energy Dialogue, the conference on the 10th Anniversary of the EU-Russia Energy Dialogue, the meetings between Director-General Lowe and Russian Deputy Minister Yanovksky and the joint session of the College of the European Commission and Russian Government on 24th February 2011. The EU – Russia Energy Dialogue marked its 10th anniversary with a high-level conference on 22 November 2010 in Brussels. At the same date, the EU-Russia Permanent Partnership Council on Energy took place. Both sides agreed to enhance and widen the scope of the Dialogue and adopted a Joint Report "EU-Russia Energy Dialogue 2000-2010: Opportunities for our future Energy Partnership". Inter alia, both sides agreed to start work on a long-term roadmap with the aim to discuss the role of Russian energy resources for the EU energy mix until 2050, to improve the functioning of the Early Warning Mechanism, to cooperate on electricity issues and to work towards the reduction of investment barriers. In the framework of the Partnership for Modernisation, both sides agreed on a detailed working plan notably in the field of energy efficiency, but also on regulatory issues.

At the meeting on 24th February 2011, both sides signed an upgraded Early Warning Mechanism with the aim to further improve an early response to potential supply interruptions, as well as Joint Statements on a EU-Russia energy roadmap until 2050 and on the creation of a EU-Russia Gas Advisory Council. The work on the EU-Russia roadmap will start in May 2011 at a regular meeting of the Thematic Group on Strategies, Forecasts and Scenarios. The Russian side continued to show considerable interest in discussing electricity interconnections between the Russian, Baltic, Nordic and other (German and Polish) electricity markets and building a strong cooperation with ENTSOE (including common infrastructure planning). The implementation of the Internal Energy Market Package has been subject to several discussions. The Commission consistently stated that the Package will be implemented according to the legal provisions but was open for listening to the Russian concerns and facilitating finding a solution on a case-by-case basis to ensure compliance with EU law. Discussions are expected to continue in a bilateral working group between Director-General Lowe and Deputy Minister Yanovksy.

The "Subgroup on Energy Infrastructure" within the EU-Russia Energy Dialogue met in September 2010 in Moscow and in April 2011 in Brussels. The EU side presented its current and upcoming policy initiatives and legislation. The Russian side gave information on oil issues (Druzhba, Baltic Pipeline System 2, projects in the Black Sea basin, the General Plan for the Development of the Russian Oil Sector until 2020, Russia's oil export strategy as regards seaborne and pipeline transport and maintenance issues for oil pipelines including the Druzhba), gas issues (Nord Stream and South Stream) and electricity (update on the construction of the Kaliningrad Nuclear Power Plant, specificities of the united energy system (UPS IPS) development in Baltic countries and Kaliningrad region).

The BEMIP HLG has a permanent representative in the Subgroup meetings, the relevant presentations of the Russian side have been disseminated at the BEMIP HLG meetings. BEMIP Member States are also represented in the other working groups of the EU-Russia Dialogue.

• Kaliningrad "Baltic" Nuclear Power Plant and Belarussian Nuclear Power Plant

According to the presentation of the Russian side at the last meeting of the EU-Russia Subgroup on Energy Infrastructures, construction permit for the Kaliningrad NPP is to be obtained in the coming months. Lithuania and the BEMIP representatives expressed concern about the speedy construction permit granting and the EIA consultation process for both NPPs. The EU side highlighted the need to continue consultations with the EU Member States concerned with regard to the impact assessment and urged the Russian side to comply with the ESPOO Convention and the Nuclear Safety Convention in full scope by providing requested information, organizing public hearings in the affected countries and consultations and only afterwards the selection of the site could follow. The need for a clear timeline for the consultation process, in light of the planned obtainment of the construction permit in May 2011, was acknowledged. The Russian side expressed its willingness to follow the principles of the ESPOO Convention. So far no steps towards the implementation were taken..

Impact on BEMIP: A strong and official reaction coming from the BEMIP Member States could facilitate a swift and clear Russian answer in this topic. The EU requesed Russia and Belarus to ensure complete and full compliance with international conventions and other international legal instruments on nuclear and environmental safety and to provide full and transparent information on relevant issues.

3. WORK COMPLETED [VS. PLANNED] AND NEXT STEPS

3.1. Electricity market integration

After some delay with Step 1 implementation, progress picked up since April 2010. Market actors reported that success of opening Price Area Estlink and Lithuanian power exchange exceeded the most optimistic predictions. The volumes traded through power exchange is significant and in Lithuanian case it accounts to more than 50% of all electricity traded and about 20% in Estonian case. Fingrid and Elering have launched an Intra-day trade possibility to Estlink. Later this will be replaced by Nord Pool Spot's Elbas market.

The successful start of market functioning in the Baltic Member States allowed NordPool Spot to announce the new project "NPS BEMIP", which will cover and integrate electricity trading of the 3 Baltic Member States. NPS BEMIP is a joint project formed by an agreement of the power exchange Nord Pool Spot AS, and Baltic as well as Finnish and Swedish TSO's AS Augstsprieguma Tīkls, LITGRID AB, Elering AS, Fingrid Oyj and Svenska Kraftnät. NPS BEMIP project offers possibilities to fulfill several of the targets described in the BEMIP. In a way it is an accelerated implementation not only of Step 2, but some actions envisaged in Steps 3 and 4. As declared by NPS the purpose of the Project is to make the sale and purchase of electricity for physical delivery between Baltic countries more efficient. Further, the purpose of the

Project is the establishment of price areas in the Physical Market Place of NPS and Intraday markets between countries and inside price areas. As reported by NPS BEMIP first meeting was held in February 2010, since then working groups and additional ad hoc groups have studied market conditions and legislation of the Baltic area. In addition to internal meetings, NPS BEMIP has held meetings with market participants in the area as well as ministries and regulators. On 15th of June a seminar of the NPS BEMIP is planned where the findings and progress in this area will be reported.

Status of Step 2 implementation:

Integration of RES into the market: in progress.

As regards market integration - implementation of regulatory provisions

The Baltic States are in the process of transposition of the Third package which will address issues such as unbundling of TSOs and their tasks and obligations, transparency requirements, etc. Until 31 of May 2011 none of the Baltic States notified to the Commission a full transposition of the Third package provisions in the area of electricity. The Commission offered to the EU Member States of the EU assistance in implementing the package and issued interpretative notes regarding certain provisions of the package. Among the Baltic States Lithuania and Latvia used this opportunity and discussed with the Commission their draft laws. The Third Package Regulation on access to the network for cross-border exchanges in electricity EC No 714/2009 applies as of 3 of March 2011. The implementation of the network codes based on the Third package provisions is being discussed at the EU level and will apply directly in the whole EU. Issues related to potential difficulties in full implementation of the Third Package rules (in particular related to full operating of the network) because of the fact that the networks are being influenced by the Russian TSO, has been discussed within the HLG in the scope of the Reflection paper attached to this report.

3.2. Electricity interconnections and generation

Progress of infrastructure projects follows overall progress. Among the main achievements it deserves mentioning that several contracts have been awarded in December 2010 for the design, supply and commission of cables and converter stations of Nordbalt and Estlink2 projects. The total amount of these contracts is about 710 million euros, of which 231 million are financed by the EEPR.

There is also a faster progress development plans for wind generation in several BEMIP countries

Interconnection projects progress reports

	Project	Short description of the Project	Target timescales	Responsible body	Status
II	Krajnik (PL) - Vierraden (DE)	upgrade 220-kV double circuit existing line into a 400-kV + phase shifting transformers installation	2013/2014	50HzT (DE) & PSE Operator (PL)	Preparatory phase: - Permitting procedure started in PL, documentation completed in DE and handed over to authorities. - Preparation tendering documentation.
12	Baczyna/ Plewiska (PL) - Eisenhüttenstadt (DE)	3 rd interconnection (400 kV) between Poland and Germany	After 2015	50 HzT (DE) & PSE-Operator (PL)	Preparatory phase: General Agreement on project development signed in March 2011. DE side: application for the start of the spatial planning procedure sent to Authorities. PL side: Preparation tender documentation for feasibility study and getting environmental decisions

	Project	Short description of the Project	Target timescales	Responsible body	Status
I3					Preparatory phase:
	LitPolLink: Elk (PL) - Alytus (LT)	The interconnection line construction Elk – Alytus (Double circuit 400kV with construction of 2x500MW BtoB converter stations)	2015 (500MW)	PSE Operator (PL) Litgrid AB (LT)	LT side: EIA report approved in Dec. 2010. Territorial planning documents: for Alytus station – approved, for 400 kV overhead line - under preparation (in process of review and approval by the competent authorities);
T.A				LitPol Link	PL side: EIA in progress. Track study completed. Procurement for acquiring construction permit being finalized
I4					Preliminary phase
	LT grid reinforcement (for LitPol)	Alytus-Kruonis	2015	Litgrid AB	Contractor for preparation of territory planning documents & IEA to be selected in Aug. 2011
		Visaginas – Kruonis	2020	Litgrid AB	Under consideration Dependant on Visaginas NPP decision by strategic investor
15					Preparatory phase:
	LT grid reinforcement (for NordBalt)	Klaipeda – Telsiai	2013	Litgrid AB	IEA and territorial planning document are approved Delayed to 2014 due to
					litigation processes with landowners.
		Musa - Panevezys	2015	Litgrid AB	Not yet started Commissioning delayed to 2018
I6	LV grid reinforcement	New 330kV lines in the central and Western part of Latvia:			Preliminary phase
	(Kurzeme ring for NordBalt)	(Grobina-Ventspils, Ventspils- Dundaga, Dundaga-Tume, Tume- Riga;	2012-2018	Augstsprieguma tikls	Preparation of the technical project

	Project	Short description of the Project	Target timescales	Responsible body	Status
17	Polish grid reinforcement Elk-Alytus	Internal PL transmission grid reinforcements (2010-2015) to make possible power import capacity of 600MW from Lithuania to Poland. Additional PL transmission grid reinforcements (2016-2020) to make possible power transfer capacity of 1000MW.	2015 2020	PSE Operator	Preparatory phase Design work and territory planning activity started
18		New 400kV interconnection between Poland and Slovakia with reinforcement of Polish internal grid.	After 2018	SEPS (SK) and PSE-Operator (PL)	Under consideration System analysis for grid reinforcement and choice of the border substation to be established
19	Polish grid reinforcement Rzeszow (PL)- Khmelnitskaya (UA)	Modernisation and resumption of existing 750 kV interconnection between Poland and Ukraine.		PSE Operator (PL) & NPC Ukrenergo (UA)	Study phase Study for synchronous interconnection is going to be launched. It will take approx. 3 years. PSE Op. started already the modernisation process of the Polish part of the line.
I11	Estonia–Latvia third interconnector	3 rd interconnection between Estonia and Latvia	2020	Augstsprieguma tikls Elering	Preparatory phase: Right-of-way and IEA studies Coordination with wind development in LV and EE

	Project	Short description of the Project	Target timescales	Responsible body	Status
112	Estlink2	2 nd HVDC interconnection with undersea cable of 650 MW capacity between Estonia (Püssi) and Finland (Anttila SS)	2014	Fingrid Elering	In progress: Seabed survey and route selection on land completed. Environmental studies completed Permitting process completed. Contracts for cable and converters signed
113	NordBalt	HVDC submarine cable of 700MW capacity between Nybro (SE) and Klaipeda (LT).	2015	Svenska Kraftnat (SE) Litgrid (LT)	In progress: Seabed survey completed. Contracts for the cable and converters signed LT: Territory planning document in a final stage. Landowners' agreement for cable route ongoing
114	Kriegers Flak combined solution	Regionally combined solution to connect 1600 MW offshore wind power in the Baltic Sea to Germany, Sweden and Denmark, as well as to provide additional transmission capacity between these countries	2016	Energinet.dk (DK), 50HzT (DE)	Pre-feasibility study completed in May 2009 Swenska Krafnät withdrew from the project Platform extension ordered for OSS Baltic 2 (former KF I) No decision on KFIII on Danish side

	Project	Short description of the Project	Target timescales	Responsible body	Status
115	FennoSkan II	HVDC submarine/overhead link between Finnböle (SE) and Rauma (FI)	12/2011	Svenska Kraftnät (SE), Fingrid (FI)	Construction phase: on track: transmission tests foreseen in August — Sept 2011. Commercial operation in Dec. 2011
I16	Great Belt (Storebælt)	HVDC submarine link between West and East Denmark.	08/2010	Energinet.dk (DK)	started commercial operations in August 2010
I117	Skagerrak IV	HVDC submarine link between Norway and Denmark.	2014	Energinet.dk, Statnett (common project organization)	Preliminary phase: EIA in DK & NW Capacity of link increased to 700MW Contracts signed for the cables and converters.
118	South Link (SE-SE) and South Western link (SE-NO)		2014 2016	Svenska Kraftnät (SE), Statnett (NO)	Preparatory phase: Feasibility study completed Start of site activities foreseen in June 2011 in the North part and in Nov 2011 in the South part On schedule

Generation projects progress report

	Project		Target	Responsible	
	Project	Short description of the Project	timescales	body	Status
G1		Up to 600 MW new CFB units on oil-shale	2016		Progress during 2010: EIA finalised Support scheme was introduced in legislation, subject to the state aid approval from the Commission Financing scheme of Eesti Energia was in principle decided by the Government
G3	Visaginas NPP	New nuclear power plant in Visaginas	2018	UAB "Visagino atomine elektrine"	Preparatory phase: EIA completed Territorial planning completed Full scale site evaluation against International Atomic Energy Agency (IAEA) requirements completed Final investment decision no later than 2013. Proposals were received from the potential Strategic Investors - Hitachi-GE Nuclear Energy Limited and Westinghouse Electric Company. Presently Visaginas NPP project is in a process of direct negotiations. Following selection of the Strategic Investor, the Project agreement is expected to be finalized

	Project	Short description of the Project	Target timescales	Responsible body	Status
G4	Nuclear development in PL	Nuclear energy development in Poland, based on Energy Policy of Poland until 2030		Ministry of Economy	Atomic law and law on preparation and realisation on investments in nuclear power to be adopted mid 2011. 2016-2020: Construction of the first block

Wind development progress report

	Project	Short description of the Project	Target timescales	Responsible body	Status
W2	Finnish wind development	This corresponds to some 2500 MW of wind power, most of which will be located along the western coast of Finland	2020		A new feed-in tariff system has entered in force in 2011, which provides a guaranteed price for electricity produced by wind power.
W3	Estonian wind development	Fastest growth is expected in wind power generation, electricity sector development plan foresees up to 900 MW of wind power by 2018	2020		150 MW in operation TSO received additional applications for: Sindi windpark: 150 MW Via Baltica Windpark 600 MW Hiiumaa offshore windpark 990 MW All developers intend to connect to the network before 2020
W4	Latvian wind development	By 2020, 550 MW of wind generation can be connected to the grid	2020		TSO has received around 2000MW Wind PP applications mainly onshore and off-shore in Western region of Latvia. Coordination with 3 rd EE-LV interconnection
W5	Lithuanian wind development	The target for 2010 is to increase this capacity to 200 MW. A level of 500 MW could be achievable by 2020	2020		160 MW in operation 42 additional MW in 2011. 260 MW in operation by end 2012
W6		High scale development of wind farms are presumed in Western and Eastern Pomerania (coastal regions), Mazury (lake land) and Wielkopolska (central west PL). Significant measures are planned as PL is obliged to reach 15% share of RES by 2020.	2020		Current installed capacity: 1724 MW Future development: 2012/2020: 500 MW pa Offshore: 2020: 500 MW

	Project	Short description of the Project	Target timescales	Responsible body	Status
W7	Wind development plans in Germany	Onshore wind power generation is expected to reach up to 37000 MW in 2020. In addition, Germany aims to have a capacity of 20000 to 25000 MW offshore wind power installed by 2030 (combined North and Baltic Sea)	2020/2030		25 000 MW installed Successful installation of turbines in deep water (alpha ventus)

3.3. Nuclear

A High Level Task Force on "Nuclear Power Generation" (HLTF) was set up to further strengthen involved governments' support in order to promote the successful implementation of the Visaginas project in Lithuania as regional Nuclear Power Plant (NPP) project, by coordinating their close cooperation, exchanging relevant information, discussing outstanding issues as well as adopting necessary measures. The HLTF also examines ways to contribute to the financing of the project through joint efforts with international financial institutions and European Union financial instruments.

The first meeting of the HLTF was held on 15 September 2010 in Warsaw. Two Working Groups were set up with the following objectives:

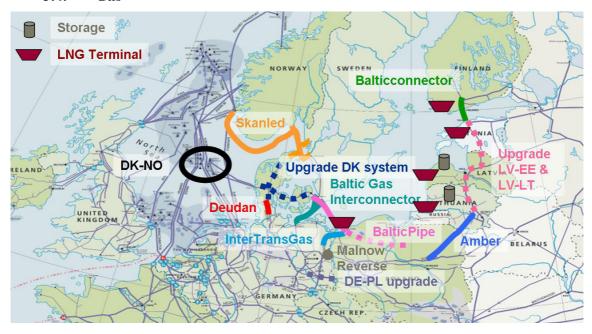
Working Group on Risks and Interconnections: key generic risks should be identified and analysed with the aim to elaborate appropriate mitigating measures. Information will be exchanged on the development of new nuclear power projects in the Baltic Region. Issues related to common policy measures concerning trading principles towards non EEA third countries will be addressed by the ongoing actions under the BEMIP HLG. The WG informs the HLTF about progress and outcome of these discussions.

Working Group "Regional Partners Forum and Financing": Regional Partners, stakeholders and potential investors shall, via enhanced regional communication, elaborate regional corporate participation in the project with the aim to support the development of the financing model for the new regional nuclear power plant.

Both working groups have met with the participation of representatives from the energy companies Visagino Atomine Elektrine (LT), Latvenergo (LV) and Eesti Energia (EE).

HLTF provided its first interim report for the BEMIP HLG meeting in December 2010. Following the outcome of the currently ongoing negotiations between Lithuania and the potential investors on the planned regional Visaginas NPP, next WG and HLTF meetings will be scheduled in the course of this year.

3.4. Gas



Approach and objectives

In September 2009 the BEMIP HLG agreed that the work on gas shall focus on the following main **objectives**:

- (1) Identify the most economical, minimum infrastructure necessary to diversify gas supplies in Finland and the three Baltic States and to end isolation and, consequently, derogations in Eastern-Baltic Sea region
- (2) Launch a taskforce to identify a regional LNG in the Eastern Baltic Sea
- (3) Find ways to additional gas sources to compensate for depletion of Danish fields and diversify sources and routes for Poland, Germany, Denmark and Sweden

Progress achieved

Objective 1: Identify minimum set of infrastructure projects in the East Baltic Sea region with a view to ending isolation and derogations

Projects identified:

- Polish Lithuanian gas interconnection
- Balticconnector (Estonia Finland)
- Regional LNG terminal

Objective 2: Regional LNG terminal

Action:

Set up taskforce to establish a common approach and cooperation to construct one LNG-terminal that is at the benefit of all Member States in the region.

Status:

The taskforce met several times in the last year. There has already been significant work carried out by the concerned countries and the Commission in assessing each of the various LNG projects proposed. Nevertheless, even after in-depth analyses and exchanges of information at technical and political level there is no agreement on the way forward and correspondingly there are still several proposed LNG terminal projects (at least one per Member State). Working groups were organised also to discuss the content of a Reflection Paper (Annex 2) prepared by the Commission setting out strategic options and recommendations on infrastructure investment, cost allocation and a common entry-exit model in the East Baltic Gas Market .

Concerning the LNG projects in the East Baltic Area, there is the need to further increase cooperation and efforts in the region in order to allow the BEMIP initiative to move towards crucial and concrete implementation of one regional LNG. The Commission, cannot select one among competing projects; however it may facilitate the process and favours a regional agreement. The Commission has proposed the below set of basic criteria based on the fulfilment of which sees potential scope for EU Institutions to support part in that project. The three criteria are:

- 1. The LNG project must be dimensioned to the size of the market that it has to serve and should therefore have a regional scope.
- 2. The initiators and owners of the project must be independent of the existing dominant supplier in all aspects.
- 3. The prerequisite for potential EU support is that there is only one single LNG project supported by at least the governments of Lithuania, Latvia and Estonia.

At this point strategic view and concrete solutions are needed. The Commission has addressed a letter to the governments of the Baltic States and Poland asking them to concretely explore this option in cooperation with the Commission. This crucial process should be finished by 2011 and a political decision should be reached before summer.

Finland will cooperate with the Baltic States and Poland in trying to find ways to join the regional market. Joining the regional market would require the construction of the Balticconnector. Finland will assess the economic feasibility of the needed infrastructure investments in the light of gas demand prospects in Finland and the competitiveness of the new gas sourcing options provided by the regional market.

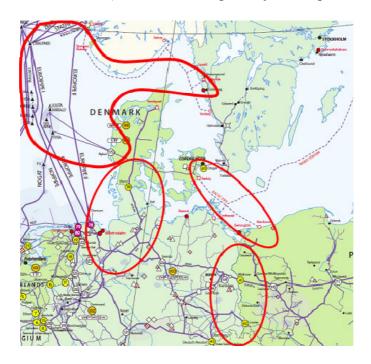
Next steps:

 During the BEMIP HLG (June 8th) the HLG will discuss the reactions of the concerned Countries to the letter sent by the Commission to the governments of the Baltic States and Poland. The objective will be to further increase cooperation and efforts in order to move towards crucial and concrete implementation of one regional LNG project.

<u>Objective 3:</u> Enhance gas security of supply in the West-Baltic Sea region: (Replacement for Danish gas field depletion and diversify sources and routes to Poland, Germany, Denmark and Sweden).

Action:

Set up taskforce West-Baltic taskforce (WBTF). According to the Terms of Reference the primary objective of the WBTF is to enhance security of supply in the West-Baltic region and compensate for depletion of Danish gas fields through the assessment of the possible options including infrastructure development (and their impact on regulatory requirements) compensating for depletion of Danish gas fields and increasing security of supply of gas to the West-Baltic Sea region, including Poland, Sweden and Denmark through diversification of routes and sources of supply as well as taking account of further Norwegian developments. Furthermore, the Task Force addresses the assessment of markets, their functioning and potential, assessment of regulatory barriers on existing infrastructure (incl. contract clauses) and need for regulatory development.



Status:

The WBTF was setup early in 2010. Baltic Gas¹ has conducted the work in the West Baltic Taskforce. The WBTF elaborated an Action Plan (see Annex I) that was presented to the BEMIP HLG in December 2010. The WBTF Action Plan was finally agreed upon by all parties in early March 2011.

In 2010 many meetings between the different stakeholders and the Commission took place. The Action Plan specifies a number of Actions to be taken from a variety of stakeholders in the period between mid 2011 to mid 2014. Four solutions were highlighted as a means to increase the security of supply for Denmark as well as Poland and Sweden.

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¹ Baltic Gas is a regional forum consisting of gas companies and Transmission System Operators in the Baltic Sea Region whose objective is to promote the gas industry and create an integrated gas market in the Baltic Sea Region.

- Axis Germany Denmark: The combination of the realisation of the integrated open season in the Netherlands and Germany including investments on the German side of the German/Danish border together with the planned grid extension in Denmark will form this interconnection at the border point Ellund.
- **Axis Germany Poland:** This solution comprises the physical and contractual reversing of the existing Yamal pipeline and the enhancement of interconnection capacity between Germany and Poland.
- Axis Norway Denmark and/or Sweden: Capacity between Norwegian gas sources and Denmark via the existing entry point in Nybro can be realized by means of the extension of the Norwegian offshore grid and its connection with and the usage of the existing Danish offshore and onshore infrastructure. As an option, this may be supported by the additional connection between the Norwegian offshore system and the existing Swedish onshore system.
- Axis Poland Denmark: This interconnection can be realized by means of the Baltic Pipe and has to be seen in the context of the LNG-Terminal in Świnoujście in the vicinity of the southern endpoint of the Baltic Pipe, and realisation of the axis Germany-Poland

WBTF progress report - Status

Objective	Activity – Responsibilities	Status May 2011	Target dates
I. Interconnection between Germany and Denmark	1.a. German regulator BNetzA and GuD are to enter into the final phase of their dialogue on the subject of the integrated open season in order to provide for the desired new transport capacities at the cross border interconnection point in Ellund. Bundesnetzagentur and Gas Unie Deutschland are responsible for this action.	On the German side the final phase of the dialogue is now finished and a decision is expected in June 2011. On the Danish side the project aiming at strengthening the gas network ha received EEPR funding (EC contribution up to €100M). It aims at strengthening the Danish gas transmission system. It involves the construction of a compressor station and a gas pipeline that extends from Ellund, on the Danish/German border, to	June 2011
II. Interconnection between Germany and Poland	2.a. Yamal Pipeline Operators will cooperate on introduction of virtual reverse flow in 2011. GAZ SYSTEM and WINGAS are responsible for this action.	Egtved. The works on the Network Code (NC) on the Polish section of the Yamal Pipeline are due to be accomplished in June. GAZ-SYSTEM S.A. plans to introduce and offer virtual reverse flow after the NC is approved by the Energy Regulatory Office (ERO).	2011

ongoing. 2.b. GAZ-SYSTEM, WINGAS and EUROPOLGAZ should make all arrangements in order to introduce physical reverse flow on the Yamal-Europe-pipeline in 2013, in line with the provisions of Regulation on security of gas supply. GAZ SYSTEM, WINGAS, EUROPOLGAZ are responsible for this action. Ongoing. GAZ-SYSTEM is in the process of negotiating the introduction of physical reverse flow with WINGAS. A discussion has been initiated regarding the possible technical solutions which could be applied at Mallnow metering station. Relevant site visit to Mallnow and dialogue took place in March. Negotiations are still ongoing.
EUROPOLGAZ should make all arrangements in order to introduce physical reverse flow on the Yamal-Europe-pipeline in 2013, in line with the provisions of Regulation on security of gas supply. GAZ SYSTEM, WINGAS, EUROPOLGAZ are responsible for this action. EUROPOLGAZ should make all process of negotiating the introduction of physical reverse flow with WINGAS. A discussion has been initiated regarding the possible technical solutions which could be applied at Mallnow metering station. Relevant site visit to Mallnow and dialogue took place in March. Negotiations are still ongoing.
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2.c. The commercial parties involved in the construction of new interconnectors should clarify the least and partitions having the least and partitions having in the least and partitions having a least and partitions have a least and partitions and the least and partitions have a least and partitions and the least and partitions are supported by the least and partitions are supported
legal and permitting barriers in Germany and Poland in more detail. legal and permitting barriers in interconnection point at Lasów. Consultation on rules and regulations concerning Lasów expansion capacity
Commercial parties involved in the interconnectors project are Casow expansion capacity allocation launched in May by GAZ-SYSTEM. The capacity allocation will
responsible are responsible for this take place in July-August
action. 2011 and will be finished by
concluding transmission
agreements with interested
shippers.
2.d. The market interest for the Project parties are engaged in 2011
project between Germany and dialogue on the possible
Poland should be evaluated. evaluation of market interest
for an interconnection
Commercial parties and TSO's between Börnicke and Police.
involved in the projects are
responsible for this action.
III. Interconnection from 3.a. Gassco will continue to analyse Gassco has in May finished Report:
Norway to Denmark and/or a connection to Denmark in the the feasibility study, which Spring 2011
Sweden ongoing Gas Infrastructure showed that a connection to
Reinforcement (GIR) project. the Dutch/Danish systems will
Study results will be presented to be costly and will not provide
the sponsor group in spring 2011. significant new export
The sponsor group will decide capacity for the Norwegian
whether to pursue the project producers. Gassco plans no
further. further activities, but other
players are well come to
Gassco is responsible for this propose a mature business
action case if such can be identified.
3.b. Energinet.dk will participate in Energinet.dk is engaged in the 2011

these analyses and will ensure dialogue between all the potential stakeholders in a Norwegian/Danish interconnection. Energinet.dk is responsible for this action.	dialogue between all stakeholders	
3.c. The Danish Energy Regulator should in the currently conducted analysis of the offshore pipeline tariffs together with the Danish Energy Agency analyse access rules and include analyses of all parts of the Danish offshore system.	The analysis of offshore pipeline tariffs is expected to be presented for the DERA board in the end of May or alternatively in the end of June. After the presentation for the board, the results can be published.	2011-6/2014
The Danish Energy Regulatory Authority and the Danish Energy Agency are responsible for this action.		
3.d. Operators of offshore infrastructure should be encouraged to analyse the potential impacts on future tariffs of increased volumes through their assets and share these analyses with the potential investors at the relevant point in time.	The operators of offshore infrastructure await the publication of the DERA analysis of offshore tariffs before any further action.	2011
The owners of this infrastructure (Dong Energy, Shell and Mærsk) are responsible for this action.		
3.e. Baltic Gas will analyse the specific needs for transparency on conditions and tariffs for using existing infrastructure.	Baltic Gas will commence the analysis process in autumn 2011	2011-6/2012
Baltic Gas is responsible for this action. 3.f. A regional TYNDP should focus on the need for connecting Norwegian Gas sources with the region (Denmark, Sweden, Poland) and implications for regional security of supply. The conclusion should be discussed between TSOs, regulators and stakeholders	In ENTSOG, the regional groups have been formed. Denmark, Sweden and Poland are in the Baltic GRIP. More specific results are expected later this year.	2011-6/2012
ENTSOG, Baltic Gas and ACER are responsible for this action.		

	2 a. The husiness case for a	Dualinsinama hassimass assa has	Madia 2011
	3.g. The business case for a	Preliminary business case has been discussed between	Medio 2011
	connection via eastern Norway to		
	Sweden is currently being analysed	investors and system users in	
	by Norwegian and Swedish gas	both Sweden and Norway.	
	consumers and Swedish TSOs. The	The parties are awaiting a	
	willingness to invest should be	decision by the Swedish	
	clarified.	government on an application	
		for concession, before	
	Norwegian and Swedish gas	reopening concrete	
	consumers and Swedish TSOs are	negotiations.	
	responsible for this action.		
IV. Interconnection	4.a. The gas demand and the	The process is still ongoing.	12/2012
between Denmark and	outlook of the level of security of		
Poland	supply in Denmark and Sweden		
	with regard to the possible supply		
	from LNG terminal in Świnoujście		
	in combination with Baltic Pipe		
	should be assessed by competent		
	authorities in the framework of the		
	new SoS Regulation (risk		
	assessment, action plans), and the		
	development in the axis Germany-		
	Poland.		
	Poland.		
	The UC-way stant and aritically		
	The "Competent authorities" as		
	pointed out in the new SoS		
	Regulation are responsible for this		
	action.		
	4.b. The issue appropriate	Work with the Tariff Network	6/2014
	allocation of tariffs when	Code is expected to start in	
	transporting gas through a series of	2012 in ENTSOG.	
	systems could be addressed by		
	ACER and ENTSOG in the work		
	with Framework Guidelines for		
	Tariff Harmonisation and the		
	subsequent network codes.		
	The National competent authorities,		
	ACER and ENTSOG are		
	responsible for this action.		
	4.c. When implementing the third	To be filled out by the	12/2011
	package provision on tariffing the	Commission.	
	issue of risk sharing between TSOs		
	and shippers in the light of long-		
	term infrastructure investments and		
	short-/medium-term capacity		
	bookings could be analysed by		
	ACER and ENTSOG, likewise the		
	European Commission could pay		
	attention to this aspect in the work		
	with the Energy Infrastructure		

package. ACER, ENTSOG, European Commission are responsible for this action.		
4.d The commercial parties should re-investigate the market potential of Baltic pipe. If no strong commercial interest confirmed, its contribution to the regional security of supplies and market integration should be fully assessed by the European Commission. The results should be discussed by competent authorities with the aim to see which further measures are needed. The potential role of the Energy Infrastructure Package in this respect is noted. The commercial parties are responsible for this action.	GAZ-SYSTEM is conducting the preparatory works regarding Baltic Pipe project. A dialogue with Energinet.dk is taking place with regard to the future development of the project. The European Commission will table a legislative proposal on energy infrastructure in October 2011	2013

Next steps:

Baltic Gas Association is fully involved in the implementation, monitoring and follow-up of the WBTF Action Plan. In the implementation phase the BEMIP HLG will intervene only if necessary to ensure that issues are addressed as they arise.

III. PROBLEMS, ISSUES

In Electricity the issues of market development and system operation should be discussed in direct negotiations with Russia and Belarus in the context of an EU-Russia negotiation.

In the Gas sector the East Baltic region needs to further increase cooperation and efforts in order to allow the BEMIP initiative to move towards a crucial and concrete implementation of one regional LNG project and related infrastructures.

IV. UPDATES TO THE ACTION PLAN

In December 2010 the BEMIP HLG approved the West Baltic Task Force Action Plan which in now part of the BEMIP Action Plan.

V. OVERALL ASSESSMENT

Overall progress of BEMIP implementation goes according to schedule for electricity, while present some challenges in meeting some of the objectives defined for gas. In particular, for gas, Objective 3 has been successfully achieved and the West Baltic Task Force has delivered an ambitious Action Plan which is currently under implementation. Equally, the works under Objective 1 concerning the preparation of PL-LT Interconnection are on track. TSOs have signed the contract for Business Case Analysis with consultants. The Parties will procure the Feasibility Study, if the results of Business Case Analysis are satisfying. The work should be delivered respectively in July 2011 and July 2012. On the contrary for Objective 2 the East Baltic Task force has encountered significant challenges in the identification of one regional LNG. There is the need to further increase cooperation and efforts in order to allow the BEMIP initiative to move towards a crucial and concrete implementation of one regional LNG project.

Monitoring the BEMIP Action Plan is necessary to ensure that issues are addressed as they arise.

In addition there is a great urgency for the member states concerned to act in order to meet the European Council Conclusions of February 4th 2011 "No EU Member State should remain isolated from the European gas and electricity networks after 2015 or see its energy security jeopardized by lack of the appropriate connections".

VI. ANNEXES

- 1. WEST BALTIC TASK FORCE ACTION PLAN
- 2. REFLECTION PAPER A STRATEGIC ANALYSIS OF INFRASTRUCUTRE PROJECTS AND A COMMON ENTRY-EXIT MODEL IN THE EAST BALTIC GAS MARKET
- 3. REFLECTION PAPER "BALTIC ELECTRICITY MARKET AND OPERATING BALTIC ELECTRICITY GRID"