



BALTIC ENERGY MARKET INTERCONNECTION PLAN

- Second progress report –

I. INTRODUCTION

1. Background

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. This plan was endorsed by the eight EU Member State Heads of State and President Barroso on June 17th.

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 of implementation. The report should be based on verifiable information provided by the implementing parties and other relevant stakeholders. This report may also be presented to the December Energy Council after discussions with the High Level Group.

2. Objectives

The main objectives of this progress report are to describe the expected and real 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

We have experienced some delays in the internal electricity market roadmap but additional actions have been taken to speed up the process, like the setting up of a taskforce of the three Baltic States. Issues regarding renewable energy support schemes have been identified. There are also a few actions ahead of schedule, such as the work launched by NordPoolSpot to create the "BEMIP price area", which in a way is an accelerated implementation of the 4-step action plan. In general, the start of the process could be regarded as success – since implementation of the first step of the roadmap, the process is now driven forward by market actors. However, HLG is monitoring closely the progress. A major topic for discussion in the next few months is the definition of a common policy between the three Baltic States towards electricity imports from non-EEA countries.

In terms of electricity interconnections, there are no major deviations from plan; only minor modifications have been reported on the projects' level, which haven't so far had an impact on overall planning. EEPR support is still highlighted as a driver for project implementation: Estlink2 investment decision has been made ahead of plan.

A new High Level taskforce is proposed on nuclear generation in order to address issues the Visaginas nuclear power plant project faces, to look at related interconnections, as well as to assess financing options for the project. The role of the taskforce will be similar to the one of the general HLG – establishing clear and equal conditions for any generator in the area to start a generating business, as it is not MS, but companies that are making the investment decision.

Gas

The gas sector now enjoys the strong focus of the BEMIP work. A major breakthrough in this area is now – politically supported by both sides - ongoing dialogue between the companies on the PL-LT gas link.

Several applications for TEN-E support have been received by the Commission in 2010, including the PL-LT gas link and a LV storage project.

The West Baltic taskforce has been launched; it is very active and will deliver an action plan at the end of the year. The LNG taskforce also had its first meeting and agreed to continue work and have its next meeting in September. Both taskforces will focus on regulatory obstacles and the identification of common principles that allow regional investments to take place.

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

- The **EU's Strategy for the Baltic Sea Region** was adopted by the European Council in October 2009. The BEMIP forms part of the Strategy covered by two flagship projects under the priority action on energy (coordinated by Latvia and Denmark). The

'lead' for the BEMIP infrastructure flagship project is Lithuania, for the BEMIP actions on electricity market integration, Latvia. The Kriegers Flak off-shore windfarm solution, as a flagship project is lead by Denmark.

Some changes have been made to the Strategy's Action Plan; these do not impact the BEMIP in a negative way. Coordination, especially for the purpose of monitoring and reporting, between the two initiatives is ensured. The HLG agreed to act as the steering group for Priority Action 10 of the Strategy.

- All projects that were listed for potential financial support in the Baltic region from the **EEPR**, have applied. For electricity, the projects are EstLink2, Nordbalt and strengthening the Latvian network and Kriegers Flak; for gas, BalticPipe, Danish and Polish gas network strengthening and Swinoujscie LNG. Additional applications for funding have also been received to implement reverse flow between Lithuania and Latvia. Individual Commission decisions will be notified to the beneficiaries and the Member States concerned during June - July.

Projects where issues have been identified: Danish project has encountered some difficulties (change of technical solution); Polish LNG (environmental concerns and public procurement issues); Sweden withdrew from the Kriegers Flak project; Latvenergo withdrew from the NordBalt project (will focus on strengthening the LV grid to prepare for NordBalt)

Impact on BEMIP: In addition to its value as a driver for timely implementation, the EEPR also helped raise the priority of gas network development on the political agenda in Denmark. Issues on project level are being dealt with so far no major impact on BEMIP implementation.

- Applications for the **TEN-E** budget have been received for the following projects in 2010:
 - Feasibility study on interconnection variants for the integration of the 3 Baltic States to EU internal Electricity Market (by the three TSOs: LITGRID Uždara akcin• bendrov• (LT), Augstsprieguma tikls (LV), Elering OÜ (EE))
 - Third interconnection between Germany and Poland: "Conducting numerous Feasibility Studies and Documentations for Board Decision, obtaining of Environmental Decisions, performing technical analysis as well as Action Management in order to allow the construction of the 3rd interconnection between Poland (Poznan Region) and Germany (Eisenhuttenstadt) together with necessary reinforcement of western part of Polish Power System" (by Polskie Sieci Elektroenergetyczne Operator Spó•ka Akcyjna (PL))
 - Lithuanian LNG solution: "Storage in Lithuania Phase 2" (by Exmar Marine (BE))
 - "Study: Identification of the business case and feasibility study for the Gas Interconnection Poland-Lithuania " (by Akcin• Bendrov• "Lietuvos Dujos" (LT), Operator Gazoci•gów Przesy•owych GAZ-SYSTEM S.A. (PL))
 - "Feasibility study on development of Incukalns Underground Gas Storage facility and section of pipelines from Russia to Germany in Latvia" (Latvijas G•ze (LV))

The study aims at analysing the gas markets of Lithuania, Latvia, Estonia and Finland. It will identify measures that shall be implemented in order to meet demands for available capacity in the storage, and enhancements to the gas grid in order to guarantee reliable gas supply. It will assess storage and transmission capacities under normal operation, as well as evaluate different scenarios for crisis

mitigation in case of gas supply interruption. The study is planned to be finished by 2012.

- "Planning permission for Interconnector Poland-Germany on German section" (by InterTransGas GmbH (DE))

The evaluation process will last until end June and the Commission will make its proposal to award funds in the autumn.

Impact on BEMIP: positive

- **Infrastructure package and new instrument**

The infrastructure package – to be adopted in November 2010 - consists of a political communication on energy infrastructure development and priorities for 2020/2030. An accompanying document will provide more detailed information on the priority infrastructure actions that were proposed under SER2, BEMIP being one (and the most advanced) of them. The communication will also identify instruments that are needed for their successful implementation.

The EU Energy Security and Infrastructure Instrument will be a follow-up to the package in spring 2011. If adopted, this new instrument would replace the current TEN-E framework for the next financial perspective.

Impact on BEMIP: positive on the prioritised projects within the action plan

- Creation of **ENTSO-E, ENTSO-G**: Topic of common interest is the regional 10-year network development plan. Synergies between this and the BEMIP exist for the Baltic Sea Region.
- Report of the **EU coordinators**: For the power link between Germany and Poland, both operators 50Hertz Transmission and PSE Operator have expressed their will to establish a project Development Company as a joint venture aiming at the preparation of the investments in the new interconnector. A letter of intent was signed on 23rd September 2009. For the Kriegers Flak project, that is earmarked for funding through the EEPR, after the decision in January 2010 of Svenska Kraftnät to withdraw from the project, 50Hertz transmission and Energinet.dk the two TSOs decided to continue with a combined solution. Svenska Kraftnät may still re-join the project later on.

The Pentalateral Political declaration of nine countries¹ was signed in December 2009 on the North Seas Countries' Offshore Grid Initiative. The Initiative was joined by Norway in February 2010.

- **EU Gas SoS Regulation**: Following the Commission's proposal for a Regulation concerning measures to safeguard security of gas supply, tabled in July 2009, discussion has been ongoing in the Council and in the European Parliament. There has been a broad agreement on the need for carrying out Risk Assessments and establishing Preventive Action Plans and Emergency Plans. These measures along with the proposed infrastructure and supply standards, and put into the context of regional cooperation and coordination shall help to reach a higher level of preparedness and prevent the adoption of national measures that are harmful for other Member States.

¹ France, Germany, Luxembourg, Netherlands, Belgium, Denmark, United Kingdom, Ireland and Sweden.

The infrastructure developments as a result of fulfilling the standards are expected to ease the isolation of the energy islands in the Baltic region.

The new focused working group - established within the framework of the BEMIP - has been launched. By initiating the national risk assessments and preparing for the establishment of a joint risk assessment, Estonia, Latvia and Lithuania took a proactive role in realizing the goals of the proposed Regulation.

The group will finish its tasks by mid-2011.

Impact on the BEMIP: outcome of the work may have infrastructure implications

- The Ministers of the three Baltic States and Deputy Minister of Poland, in the presence of the European Commissioner for Energy, signed on May 31st 2010 a **Joint Communiqué** to give support to the integration of the Baltic electricity market into the EU energy market and the new nuclear power plant project in Lithuania. A High Level Task Force on "Nuclear Power Generation" will be set up to strengthen competitive conditions for the new nuclear power plant in Lithuania and also to examine ways to contribute to the financing of the project through joint efforts with international financial institutions and European Union financial instruments.

Impact on BEMIP: The Joint Communiqué aims at strengthening cooperation between the regional partners and allows a forum for issues to be resolved.

Recommendation: The taskforce on "Nuclear Power Generation" is proposed to be created within the framework of the BEMIP and should report progress to the Ministers by end of 2010. The taskforce should aim at establishing clear and equal conditions for power generation investments.

- **Member States energy policies**

Estonia: To secure continuous energy supply, the Estonian National Development Plan of the Energy Sector until 2020 foresees the necessity to diversify the use of energy sources and construct new natural gas and LNG infrastructures to fulfil n-1 rule.

Poland's "Energy Policy until 2030" – priorities (approved 10 November, 2009 by the Council of Ministers)

- Energy efficiency improvement
- Increasing security of fuel and energy supplies
- Diversification of power generation sources through implementation of nuclear power
- Increasing use of renewable energy sources, including bio fuels
- Development of competitive fuel and energy markets
- Limitation of energy sector's impact on environment

Impact on BEMIP: impact on the work within the (East-Baltic) LNG taskforce; nuclear developments in the region to follow; increased activity in wind development and consequent strengthening and upgrading of grids

Russian aspects

- **EU-Russia Energy Dialogue**

The meeting of the subgroup on Infrastructures was held on January 27th 2010. The BEMIP group was represented by EE.

The Commission gave presentations on EU-Russia Energy Dialogue, TEN-E & EEPR and the new Energy Security and Infrastructure Instrument. ENTSOE and ENTSOG representatives delivered presentations; the main elements of the 10 Year Network Development Plans were also presented.

The Russian side delivered two presentations, one on the construction of a nuclear power plant in Kaliningrad ("Baltic NPP") and a review on new major oil export pipelines planned or under construction in Russia.

For oil pipelines, Samsun-Ceyhan and Burgas - Alexandroupolis (BAP) were mentioned, underlining that these are not mutually exclusive and Russia intends to build both of them in order to bypass the congested Turkish Straits. The BPS2 pipeline (to the Baltic Sea), however is said to only complement the existing pipeline without aiming at diverting oil from the northern part of Druzhba.

RF also made an intervention indicating that the reverse flow of the Odessa Brody did not have any economic rationale and will create enormous problem for transit of Russian oil through the Southern Druzhba.

- **Yamal II line** – no progress – lack of answer from Russian side (unofficially answer is “no” until Nord Stream is on stream). It could have an impact on additional options for a PL-LT gas connection
- **Baltic Nuclear Power Plant**, strong marketing continues on this project. Enel has signed a cooperation agreement on the Baltic NPP and will decide whether to join the project in July 2011.

The project looks at export opportunities targeting the German market, Poland and Lithuania. The Baltic NPP together with proposed interconnections would make financially most costly the long-term plan of the Baltic States to join the European electricity system under ENTSO-E.

- Other NPP in the pipeline is the one planned in Belarus to be commissioned around 2020.

Impact on BEMIP: The Baltic Nuclear Power Plant project increases the risk of not being able to attract strategic investors for the Visaginas Nuclear Power Plant. Such a project would also need additional interconnections in the area that would have an impact on the projects within the BEMIP.

3. Work completed [vs. planned] and next steps

3.1. Electricity market integration

Step 1 of the electricity market roadmap is fully implemented. A decision to open Price Area Estlink was taken by NordPool Spot in February and completed in April 2010.

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 Baltic", which will cover and integrate electricity trading of the 3 Baltic Member States. In a way it is an accelerated implementation not only of Step 2, but some actions envisaged in Steps 3 and 4. However, detailed monitoring of individual actions in Step 2 is needed in order to secure and maintain the momentum.

Status of Step 2 implementation:

- Abolition of regulated prices

Done (to the extent agreed by BEMIP)

- Removal of cross border restrictions (licences and tariff)

Done

- Integration of RES into the market

In progress: a meeting of a task force took place in Tallinn. Changes towards renewable support schemes were made in Estonia, and are being planned in Latvia and Lithuania. In Latvia, RES are subject to a mandatory procurement obligation that is expected to change when the new legislation is passed in order to allow RES to enter market without losing subsidies. In Lithuania, RES connected to a TSO network can enter the market without losing subsidy. A small number of RES generators connected to a DSO network has no choice but to sell its electricity to a DSO only. The volumes concerned here are in the area of 5% from total RES generation. However this is also planned to be changed so to allow RES generators connected to a DSO network to enter the market without losing subsidies for renewable generation.

- Separation of TSO roles/activities

In February 2010, the Government of Estonia bought the TSO Elering from Eesti Energia. By this transaction the ownership unbundling was finalized in Estonia.

Lithuania has announced that Ownership Unbundling will be implemented, in Estonia it is completed and starting from January 2010, the owner of the TSO is the Ministry of Economic Affairs and Communication. Latvian authorities are considering all the options at the moment.

- Basic transparency rules

All needed data for Estlink Price Area and for available capacity in the borders of Estonia can be found on the TSO's website. NTC and ATC info is being published, however some technical solution needs to be found on how to transfer available data.

- Congestion management

The first weekly capacity auction on Estonian and Latvian border was organised in April. The rules for the auctions have been agreed between Estonian and Latvian TSOs. As congestion among the 3 Baltic Member States is a relatively new phenomenon, involvement of all TSOs of the region in the process of preparation of agreements and subsequent information availability to market participants is key.

3.2. Electricity interconnections and generation

Progress of infrastructure projects follows overall progress. Among the main achievements it deserves mentioning that the investment decision on Estlink2 has been reached ahead of plan. There is also a faster progress and more ambitious development plans for wind generation in several BEMIP countries.

Major changes in projects during this reporting period are the Swedish withdrawal from Kriegers Flak and the Latvian withdrawal from the NordBalt link. The remaining project promoters go forward with the projects as planned.

Interconnection projects

Progress reports were received for the following projects:

	Project	Short description of the Project	Target timescales	Responsible body	Status
I1	Krajnik (PL) - Vierraden (DE)	upgrade 220-kV double circuit existing line into a 400-kV + phase shifting transformers installation	2013	50HzT (DE) & PSE Operator (PL)	<u>Preparatory phase::</u> Preparation of documents for permitting procedures and tendering.
I2	Baczyna/ Plewiska (PL) - Eisenhüttenstadt (DE)	3 rd interconnection (400 kV) between Poland and Germany	After 2015	50 HzT (DE) & PSE-Operator (PL)	Technical calculation commenced <u>Preparatory phase::</u> Preparation of the Project Development Company. Ger-Pol Power Bridge.
I3	LitPolLink: Elk (PL) - Alytus (LT)	The interconnection line construction Elk – Alytus (Double circuit 400kV with construction of 2x500MW BtoB converter stations)	2015	PSE Operator (PL) Lietuvos Energija (LT) LitPol Link	<u>Preparatory phase:</u> Preparation of IEA and territorial planning.

	Project	Short description of the Project	Target timescales	Responsible body	Status
I4	LT grid reinforcement (for LitPol)	Alytus-Kruonis	2015	Lietuvos Energija	<u>Preliminary phase</u> EIA in 2011
		Visaginas – Kruonis	2020	Lietuvos Energija	<u>Under consideration</u> Dependant on 2 nd unit at Visaginas NPP (decision by strategic investor)
I5	LT grid reinforcement (for NordBalt)	Klaipeda – Telsiai	2013	Lietuvos Energija	<u>Preparatory phase:</u> Preparation of IEA and territorial planning.
		Musa - Panevezys	2015	Lietuvos Energija	<u>Preliminary phase</u> EIA in 2014 Project implementation is aligned with NordBalt
I6	LV grid reinforcement (Kurzeme ring for NordBalt)	New 330kV lines in the central and Western part of Latvia: (Grobina-Ventspils, Ventspils-Dundaga, Dundaga-Tume, Tume-Riga;	2012-2018	Augstsprieguma tikls	<u>Preliminary phase</u> Preparation of the technical project
I7	Polish grid reinforcement	Internal PL transmission grid reinforcements (2010-2015) to make possible power import capacity of 600MW from Lithuania to Poland.	2015	PSE Operator	<u>Preparatory phase</u> Agreements with contractors for the design and the construction signed
		Additional PL transmission grid reinforcements (2016-2020) to make possible power transfer capacity of 1000MW.	2020		
I8	Byczyna (PL) - Varin (SK)	New 400kV interconnection between Poland and Slovakia with reinforcement of Polish internal grid.	After 2018	SEPS (SK) and PSE-Operator (PL)	<u>Under consideration</u>
I9	Rzeszow (PL) – Khmel'nitskaya (UA)	Modernisation and resumption of existing 750 kV interconnection between Poland and Ukraine.		PSE Operator (PL) & Ukrainian TSO	Study phase Study for synchronous interconnection is going to be launched. Carrying out the study will take approx. 3 years
I11	Estonia – Latvia third interconnector	3 rd interconnection between Estonia and Latvia	2020	Augstsprieguma tikls, Elering	<u>Preparatory phase:</u> 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
I12	Estlink2	2 nd HVDC interconnection with undersea cable of 650 MW capacity between Estonia (Püssi) and Finland (Anttila SS)	2014	Fingrid, Elering	<u>Preparatory phase:</u> Seabed survey completed Environmental studies completed in EE and FI Permitting process on going Tendering procedures for the cable and converters on going Investment decision achieved
I13	NordBalt	HVDC submarine cable of 700MW capacity between Nybro (SE) and Klaipeda (LT).	2015	Svenska Kraftnat (SE), Lietuvos Energija (LT)	<u>Preparatory phase:</u> Seabed survey completed Latvenergo withdrew from the project Preparation of IEA, of territory planning documents. Tendering procedures for the cable and converters ongoing On schedule
I14	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)	<u>Preliminary phase</u> Pre-feasibility study completed in May 2009 Swenska Kraftnät withdrew from the project Next phase: detailed feasibility study and survey on environmental data
I15	FennoSkan II	HVDC submarine/overhead link between Finnböle (SE) and Rauma (FI)	12/2011	Svenska Kraftnät (SE), Fingrid (FI)	<u>Construction phase:</u> on track

	Project	Short description of the Project	Target timescales	Responsible body	Status
I16	Great Belt (Storebælt)	HVDC submarine link between West and East Denmark.	08/2010	Energinet.dk (DK)	<u>Construction phase</u> on track
I17	Skagerrak IV	HVDC submarine link between Norway and Denmark.	2014	Energinet.dk, Statnett (common project organization)	<u>Preparatory phase:</u> EIA in DK & NW Capacity of link increased to 700MW
I18	South Link (SE-SE) and South Western link (SE-NO)	Combination of two interconnectors between Hörnby (SE) and Jönköping / Oslo (SE / NO)	2013 2016	Svenska Kraftnät (SE), Statnett (NO)	<u>Preparatory phase:</u> Feasibility study completed Preparation of the technical & commercial documents. On schedule

Generation projects

A progress report was received for the following projects:

	Project	Short description of the Project	Target timescales	Responsible body	Status
G1	Oil-shale CFB-s in Estonia	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 Tender is ongoing

	Project	Short description of the Project	Target timescales	Responsible body	Status
G3	Visaginas NPP	New nuclear power plant in Visaginas	2018 (1 st unit)	UAB "Visagino atominė elektrinė"	Preparatory phase: EIA completed Territorial planning in progress On schedule Final investment decision no later than 2013. Main risk: lack of strategic investors by 2010/2011
G4	Nuclear development in PL	Based on Energy Policy of Poland until 2030	2020	Ministry of Economy	First block in 2020; Data on capacity, technology, location not yet available

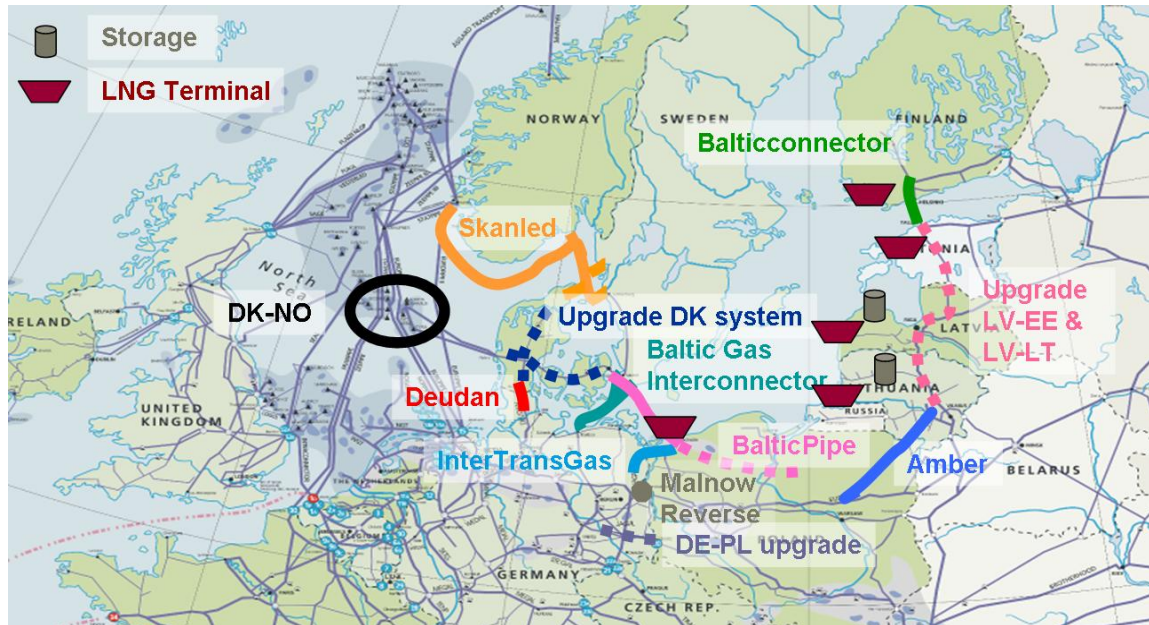
Wind development plans

Information was received for the following plans:

	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		<u>Progress are expected next year:</u> Wind atlas published on 24 th Nov '09 New legislative proposal (feed-in tariff) in 2010

	Project	Short description of the Project	Target timescales	Responsible body	Status
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 on-shore 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		90 MW in operation 152 MW in operation by end 2010 300 MW in operation by end 2013
W6	Polish wind development	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 capacity 724 MW; Future development: 2010: +200 MW 2011: + 300 MW 2012: -350 MW 2013: - 400 MW 2014/2020: 500 MW pa Offshore: 2019: 250 MW 2020: 450 MW
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 onshore capacity surpassed in 2009 Successful installation of turbines in deep water (alpha ventus)

3.3. Updated action plan for Gas



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:

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

Status:

At the last working group meeting in November 2009, the Polish and Lithuanian TSOs agreed to start working together to get closer to a common definition of a Polish – Lithuanian gas interconnector project and to identify the minimum common denominator/interest for the countries.

Talks between companies about the project have received political support from both sides; Lithuania asked the Commission to classify this project as a priority project. The Polish – Lithuanian gas link is identified by the current TEN-E guidelines as a project of common interest (as part of the Amber pipeline) and as such it can apply for TEN-E support.

The TSOs of Lithuania and Poland, Lietuvos Dujos and Gaz-System, supported by the Ministry of Energy of the Republic of Lithuania and Ministry of Economy of the Republic of Poland, submitted an application for financial support under the TEN-E 2010 to perform a study on "Identification of the business case and feasibility study for the Gas Interconnection Poland-Lithuania".

The Management Boards of both TSOs have agreed to establish a joint working group to implement the business case analysis and the feasibility study on Gas Interconnection Lithuania-Poland.

Based on this study justification, further activities, scope and stakeholders of this Project will be identified.

The main goal is to increase the security of gas supplies in the region of East Baltic States through inter alia creating new import capacity both to and through the region.

The project would contribute to diversification of sources and routes via Polish LNG terminal, NCS via Baltic Pipe also to implement the requirements of the Proposed Regulation of the European Parliament and of the Council concerning measures to safeguard security of gas supply and repealing Directive 2004/67/EC.

Establishing "virtual reverse flow" service on Yamal pipeline (which depends on Yamal pipeline shareholders' decision and then on the decision of the TSO on that pipeline) is a crucial element for serving future PL-LT gas link with gas flows and an element to ensure Third Party Access to Yamal pipeline. Similarly the viability of the PL-LT connector would be enhanced by moving the delivery point of Russian gas supplies on that pipeline from DE-PL border to the external EU border (PL-Belarus) – that issue depends on German and Russian companies' decisions.

Next steps:

Follow progress of the feasibility study on the PL-LT gas interconnection project.

- **Balticconnector (Estonia – Finland)**

Status:

It has been confirmed by both EE and FI that Balticconnector is closely linked to the regional LNG option(s). Balticconnector's feasibility is still being studied and it will be concluded by the end of 2010.

In order to assess the impact of Balticconnector on the Latvian underground gas storage (UGS), Latvijas Gaze is planning to launch a feasibility study for which an application has been submitted for financial support under the TEN-E.

Next steps:

Wait for outcome of feasibility study on Balticconnector.

- **Regional LNG terminal**

The regional LNG will be discussed in the framework of the LNG taskforce (see Objective 2 below).

Objective 2: Regional LNG

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 has been launched; still all locations in all four Member States are under discussion. These projects are generally driven by private companies.

It has been agreed that the LNG terminal needs to be considered within the framework of all other infrastructure projects in the region, including developments in North-West Russia. Impact of these projects, and especially of a potential Polish-Lithuanian gas link, on the LNG option needs to be assessed.

Any regional LNG terminal would serve the four Eastern Baltic Sea States, therefore it has to be seen in combination with the gas link between Estonia and Finland.

A common study by the companies on Finnish (Inkoo) and Estonian (Paldiski) LNG locations will be performed and will be ready by early September.

Results on the Balticconnector will be available by end of 2010. Other studies for Estonian and Finnish LNGs will also be ready by mid 2011.

Regulatory obstacles, open questions on regional investments still need to be discussed; this will be on the agenda of the next meeting in September.

Outcome of feasibility studies:

Estonia (Ramboll): three market development scenarios have been identified based on gas grid development in the region. According to these scenarios, the best business case for a regional LNG is when the four Member States are connected to each other (Balticconnector is implemented) but not to the EU network (through PL-LT). For this scenario (No2), an LNG terminal in Estonia may seem more attractive due to its central location in the region between the biggest consumer (FI) and the gas storage (LV).

In case, the PL-LT gas link is also built (scenario 3), the value of having an LNG terminal for the region is smaller. For this scenario, the planned Polish LNG terminal at • winouj•cie may be able to play a sort of regional role in the area.

It has also been highlighted, that - should these projects be implemented – as a consequence of enhanced security of gas supply could also contribute to an increase in gas demand in this region.

Estonia: There are two locations in Estonia. The terminal planned in Paldiski is designed considering the impact of the Baltic Connector and involves compressor station for Baltic Connector in its scope. Several preliminary studies have been performed; processes for partial changing of general planning of Paldiski and detail planning of the terminal area are currently initiated. Preliminary planning of the terminal is under development. Planned date for Permit of Building is December 2010.

Finland: From the Finnish perspective an LNG terminal serving Finland is seen as crucial element for increasing the security of supply of the country as it diversifies away from the sole gas supplier. Finland is currently the biggest consumer of gas among the four countries; this is stressed as an important factor for site selection for the LNG. The pre-feasibility study for the LNG terminal by the end of 2009, and the feasibility study by end 2011 (Finland is also looking into lighter technology options for the LNG terminal).

Lithuania: Lithuania currently is conducting a thorough analysis of alternative gas supply possibilities. This analysis will show the economic, technological and technical

options concerning Lithuanian and Polish Gas link, construction of LNG terminal in Lithuania, Underground Natural Gas Storage in Syderiai. The results of this analysis will be accumulated and the decisions accordingly will be taken by the 2nd half of this year.

Next steps:

- Next meeting in September 2010 where industry will also be invited. Main objectives are to assess the LNG terminal in the context of other infrastructure development projects in the area (including North-West Russia), and to identify obstacles in the regulatory framework for investments

Objective 3: Enhance gas security of supply in the West-Baltic Sea region (merger of Objective 3: Replacement for Danish gas field depletion + Objective 4: Diversify sources and routes for Poland)

Action:

– West-Baltic taskforce

Projects:

– BalticPipe

– • winouj•cie LNG

– Yamal physical and virtual reverse flow, and Yamal II line

– Development of gas links between the German and the Polish markets

• **West-Baltic taskforce**

Status:

The West-Baltic taskforce had its kick-off meeting on February 26th. The terms of reference of this group has been agreed; the overarching objective is to contribute to enhanced security of gas supply in the West-Baltic region. It addresses the issue of Danish gas field depletion, security of gas supply through diversification of routes and sources of supply to Poland, Germany, Denmark and Sweden.

The taskforce will assess possible options for infrastructure development and regulatory requirements. Baltic Gas Association drives the work of the Taskforce and will be responsible to deliver an Action Plan by end of 2010. COM is a facilitator.

The West-Baltic taskforce had a second meeting in Copenhagen on May 19th. The main focus of the meeting was the identification of barriers to investments. In the context of the taskforce, Baltic Gas Association drafted two documents that were presented and discussed during the meeting. The first one the "stocktaking" document provides an assessment of the gas market situation in the West Baltic Sea Region in terms of gas supply and demand, existing and ongoing infrastructure

investments and their impacts on security of energy supply and market integration. The second document aims at identifying "barriers" to investment projects in gas.

Both documents reflect the perspective of the members of the Baltic Gas Association and present a useful starting point that open the possibility for further analysis. It was agreed that a deeper analysis is required and will be carried out by Baltic Gas based on the input of the members of the taskforce, including the view of Norway as observer, the input of the Commission and the perspective of the regulators. The potential of unconventional gas needs to be taken into account in the "stocktaking"; gas storage infrastructure need to be included too. In parallel a deeper analysis is needed aiming at a better identification of the different kind of challenges and barriers and consequently at the identification of the possible actions to remove them.

The "pancaking issue" (sum of different tariffs) was identified as a potentially significant barrier to investments. It was pointed the Skanled project should not be considered as the project of the Norwegian Government but the owners of the project are all the companies potentially interested that wish to revitalize it.

Next steps:

- Baltic Gas Association will update the "Stocktaking" ad "Barriers" documents.
- In order to better take into account the perspective of the regulators, the Danish regulator will make a comparison of the findings of a recent analysis carried out by the regulators of the region with the preliminary findings presented by Baltic Gas. The comparison will be completed by end of June.
- Next meeting is scheduled mid September to concretely move towards an action plan by the end of the year.

• **BalticPipe**

Status:

The BalticPipe aims at connecting the Danish and Polish gas systems to Norwegian gas resources. The gas pipeline will be offshore with an approximate length of 260-290 km. The estimated annual capacity proposed during Open Season procedure in 2009 was 3 bcm from Denmark to Poland (with possibility of reverse flow later on). The total cost of the project is estimated to approximately €450 million². The BalticPipe will include the onshore part on the Danish and Polish side.

In July 2009 in the context of the EEPR, Energinet.dk (Danish TSO) submitted an application seeking for financial support for the pre-engineering studies for the interconnection between Denmark and Poland.

In the context of the EEPR, also Gaz-System (Poland) submitted an application for funding concerning the extension of the Polish Transmission System. The planned infrastructure would allow the delivery of gas from Denmark to Poland and in parallel would enable a new source of natural gas from the planned Polish LNG terminal for the BalticPipe.

² According to Gaz- System

In March 2010 the Commission adopted the Decision to grant €2.3b to 43 projects in the interconnection/infrastructure sub programme under the EEP Regulation³. Both proposals have been included.

Next steps:

Following the adoption of the EEP Award Decision⁴, Commission services are finalizing the individual award decision. The decisions are expected to be notified to the beneficiaries in June 2010. Follow project progress.

- **winouj•cie LNG**

In the context of the EEP an application for funding has been submitted by Polskie LNG S.A. and Zarząd Morskich Portów Szczecin i winouj•cie (harbour management entities). The applicants are seeking for financial support for the construction of the two LNG storage tanks and of the "the berth" (infrastructure which allows a safe discharge of the gas from the vessels).

The terminal is expected to be operational in July 2014. The main objective of the project is increasing security of supply and supplies diversification to Poland and to also to the West- and East-Baltic Region. The main condition to make this happen is building Polish-Lithuanian gas interconnection. The terminal will also grant access to the global and liquid LNG Market to the gas companies in the region.

This proposal has been included in the EEP Award Decision adopted by the Commission in March 2010.

Next steps:

Commission services are finalizing the individual award decision. The decision is expected to be notified to the beneficiaries in autumn 2010. Follow progress.

- **Yamal physical reverse flow station, virtual reverse flow service**

Physical reverse flow **station** on Yamal in DE nearby PL border - no progress yet (unclear status of discussions) but high priority due to its significance for security of supply of Poland and, in the future, for the East Baltic Region.

Virtual reverse flow service - no progress yet (depends on Yamal shareholders) but high priority due to its significance for supplying to the connection of the East Baltic and the West Baltic markets (esp. Polish – Lithuanian gas interconnection) and for granting Third Party Access to Yamal.

- **Development of gas links between DE-PL**

Both the InterTransGas project and the project of EWE/EWE Polska/PGNiG for an interconnection near Kostrzyn are making progress.

³ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:200:0031:0045:EN:PDF>

⁴ http://ec.europa.eu/energy/eepr/doc/i10_231_en.pdf

Concerning the EWE project for an interconnection near Kostrzyn, intense talks between EWE and PGNiG concerning the implementation of the project are ongoing.

ITG connector concept

Negotiations are ongoing. ITG has submitted application for financial support from TEN-E 2010 program for planning phase of connection Bornicke – Police. The company is planning to receive for German section *regional planning permission* till November 2010 and *Public works planning permission* till December 2011. The public works planning procedure for the Polish section are carried out by PGNiG S.A. Planning permission for the route on Polish section was granted on February 2009. The final investment decision shall be made end of 2011 as to enable completion of the construction by end of December 2012.

ITG intends to operate the Interconnector Poland – Germany on its own as TSO or ISO after taking the Interconnector into service. This is why the project will need additional analyses on how it fits in the EU regulatory framework from the internal energy market perspective, in Poland the only TSO permitted by law is Gaz-System which is not involved in ITG works or consulted, and as Poland is implementing the full ownership unbundling option of the 3rd internal energy market package.

Next steps:

It should be analysed if there are any feasible possibilities of ITG to contribute to support the construction of the PL-LT link, in comparing it to other options as virtual reverse flow service on Yamal I, or the construction of Yamal II line).

It should also be clarified how this project fits in the EU regulatory framework from the internal energy market perspective in particular in respect to unbundling provisions of the 3rd liberalisation package and provisions on obligations of an TSO e.g. granting Third Party Access

Developing capacity of existing DE-PL Interconnection in Lasów

Substantial progress towards the development of gas links between DE and PL with respect to the existing interconnection in Lasów. This infrastructure joins the networks of ONTRAS (GasPool) and Gaz-System and currently provides the capacity of 0,9 Bcm/y towards Poland.

Gaz-System has already begun the works which are aiming at upgrading its existing transmission network in the region of Lasów interconnection. These investments will provide the additional 0,6 Bcm/y capacity at the Polish entry point. Thus, starting from 2012 the Lasów capacity will be enhanced to 1,5 Bcm/y towards Poland.

Gaz-System project was granted the EEPR support within the financial envelope serving to support infrastructure and equipment to permit reverse gas flow in the event of short term supply disruption.

OPAL connector concept

In October 2009 WINGAS has renewed its offer made to PGNiG already earlier about connecting Poland to the German network by building a direct connection to the so called OPAL pipeline, which will be built from Greifswald to the Czech border

and shall be finished in 2011. These projects would also enhance the possibility of making use of German gas storages.

Poland does not see any added value in direct connection to OPAL pipeline (in fact this line is a Nord Stream's on-shore part). Poland has already direct connection with ONTRAS network in Lasow and with JAGAL pipeline in Malnow (which is Yamal pipeline - however there is still no reverse station on this line). Connection with OPAL does not follow the strategy of diversification of routes and sources of supply.

III. PROBLEMS, ISSUES

- Common policy of the three Baltic States towards electricity import from non-EEA countries needs to be discussed

Recommendation: three Baltic States' taskforce to discuss (latest September 2010)

- Russian aspects: Lack of reliable information on plans and uncertainty of planned power generation capacity and interconnections in the region. Baltic NPP, Belarusian NPP to be seen in this context

Recommendation: New High Level taskforce on Nuclear Power Generation should assess situation and propose actions if needed

- Request for public financial support (and "priority handling") for projects with role of enhancing EU security of supply and where commercial viability is less clear (e.g. Polish – Lithuanian gas link)

Recommendation: from COM side current TEN-E is available for feasibility studies. For the future, the infrastructure package to be adopted end of 2010 will propose improvements for the new financial perspective based on the needs of priority infrastructure initiatives, such as the BEMIP. In the meantime, Member States could agree on common priorities for the use of available financing from the Structural Funds. Other available options on a national level to support and speed up work on specific projects need to be examined.

- Due to the financial crisis it has become difficult to finance large offshore-projects with volumes that usually exceed 1.5 billion €

IV. UPDATES TO THE ACTION PLAN

- 1. To the electricity actions and projects (new or modification of scope, timing, etc)**

None

- 2. Update the list of risks, if any changes**

During the second reporting period, the following additional risks have been identified:

- Not finding a strategic investor for Visaginas NPP which may also impact the willingness of Polish investment to go forward with LitPolLink.

- Risk of continuing crisis

3. Modification to monitoring

In the BEMIP action Plan, it has been agreed that frequency of progress reports will be discussed after the first year of implementation. There were two progress reports during the first year.

- Yearly reporting from now on, next progress report due in June 2011.
- High Level Group meetings will be held as necessary (current frequency of approximately 3-4 meetings a year is acceptable).

V. OVERALL ASSESSMENT

Overall progress of BEMIP implementation goes according to schedule. Continued monitoring is necessary to ensure issues are addressed as they arise.

The gas sector now enjoys the strong focus of the BEMIP work which will continue in the coming months with a view of defining a concrete action plan in that area. Developments from the new taskforces (West-Baltic gas, East-Baltic LNG and Nuclear generation) are expected by the end of the year and spring next year.

VI. ANNEXES

1. Project Status Reports