

**Transboundary Risks
The Temelin Case***

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1. Austria's pathway into nuclear isolation

After the First Geneva Conference in 1955 and the Atoms for Peace Movement also Austria followed enthusiastically the worldwide nuclear development by building one industrial oriented 10 MW reactor in Seibersdorf (initial criticality in September 1960), one university training reactor in Vienna (initial criticality in March 1962) and another 1 kW training reactor in Graz (initial criticality in May 1965). The Seibersdorf reactor should further act as the research centre for the planning of future nuclear power plants (NPP) in Austria by the end of the 60ies. At that time there were also plans for a small 10 to 20 MWe prototype reactor, a project which was dropped in favour of a full scale NPP. These plans for the first NPP took shape in the second half of the 60ies by establishing a organisation in charge of this project.

2. The Zwentendorf Case

The Austrian government realized that in the end of the 70ies an additional source of energy will be necessary to cover the needs of industry and consumers. As a possible solution several nuclear power plants (NPP) were taken into consideration and two companies were founded, the Kernkraftwerks-Planungsgesellschaft KKWP in 1968 as the main coordinator of nuclear planning and the Gemeinschaftskernkraftwerk Tullnerfeld GmbH GKT in 1970 for the project of the NPP Zwentendorf. After a call for tender and a selection process Siemens-Austria was contracted to supply a 700 MWe Boiling Water Reactor at the site of Zwentendorf about 40 km west of Vienna. The first construction permit was issued in February 1972 and construction started immediately. The contract included that more than 70 % of the civil-, mechanical- and electrical components were supplied by the then very capable Austrian nuclear industry.

In the mid 70ies a world wide anti-nuclear movement started which also reached Austria. Many anti-nuclear groups started to question the necessity of the NPP and also media reports supported this movement. Various groups such as mothers against nuclear, medical doctors against nuclear, biologist against nuclear and many others were established resulting in the fact that Austria's population became more and more uncertain about nuclear issues. Therefore the government decided to set up a group of experts to carry out a nuclear information campaign which failed completely as the information meetings were mainly attended by anti-nuclear activists and no serious discussion was possible.

Therefore the Kreisky government decided in 1978 to carry out a public referendum on the future of nuclear power in Austria. Until this moment the discussions were carried out mainly on technical arguments for and against

nuclear power, but the coming referendum set for November 5th 1978 brought a new political aspect into the situation.

When the NPP was decided in the 60ies Austria's government was under Christian Democratic leadership (OeVP), this was the party which was the driving force behind the NPP at that time. Meanwhile Austria was under Social Democratic leadership (SPOe) with Chancellor Kreisky. As Kreisky was also supporting the NPP and even stated that in case of a negative result of the referendum he would resign, many pro-nuclear OeVP party members saw a chance to remove Kreisky from government even if they were pro-nuclear and they voted therefore anti-nuclear for political reasons.

In addition OeVP minded members in the energy industry were afraid that the continuous development of hydro-power in Austria might be negatively influenced if nuclear power is introduced, therefore there was also little support for a pro-nuclear movement in the power industry. The referendum was carried out with great emotions and resulted as follows:

31,6 % against NPP
31,0 % for NPP
35,9 % did not participate
1,5 % invalid

The absolute difference in votes were about 30 000 votes with totally 5 million allowed voters. As a result the government issued a law on December 1, 1978 which forbids "the use of nuclear fission for energy production in Austria" and this law can only be changed with a 2/3 majority in parliament.

In the following years some efforts by the Electricity Boards were initiated to bring the NPP back into discussion with a possible restart but the accident in Three Mile Island in March 1979 and the Chernobyl accident in April 1986 finally closed the Zwentendorf chapter and gave an important support to the public, to the media and to the Austrian government that the 1978 decision was right. Until today a few components have been sold to other power stations but it is still interesting to visit the NPP Zwentendorf as a historical technical monument.

3. The Mochovce Case

Ever since this time all Austrian political parties and all major newspapers and media follow a strict anti-nuclear policy which is not only concentrated on Austria but which is also exported to neighbour countries. As towards the end of the 1980ies the former uniform Eastern block disintegrated, the borders opened

and Austria realized that a number of Soviet designed NPP's are operating near the borders, the anti-nuclear activities now expanded across the borders.

In October 1978 the government decided to establish a Reactor Safety Commission (RSC) which was composed of a number of national and international senior specialists in the nuclear field, this Commission was created to supply the Government with highly qualified expertise on nuclear issues. However in April 1990 the RSC was dissolved under dubious legal aspects by Chancellor Vranitzky and replaced by another group called "Forum für Atomfragen - FAF", a group which was mainly composed of persons with a well known anti-nuclear background and which was financially well supported by the Austrian government. This group should support the government with technical expertise in its anti-nuclear strategy in neighbour countries.

The first major test case was the decision of the Slovak Republic to continue work on the WWER 440/213 NPP at the site of Mochovce. At that site four units of WWER 440/213 were in various stages of construction during the separation of Czech Republic (CR) and Slovak Republic (SR). After a careful review process the SR decided to complete at least two of the 4 NPP's which immediately created a storm of protest in Austria although this NPP's are about 120 km away from the Austrian border. On request of the Austrian government with very cooperative support of SR the FAF was supplied with all necessary documents on the design, safety issues and licensing documents including technical specialist meetings and facility visits. The result of the time consuming and expensive review process by FAF were a several 100 pages report summarizing that the NPP Mochovce is basically unsafe, does not fulfil international accepted safety standards and poses a high risk to the Austrian population. This is in contradiction to a number of international safety review teams by the IAEA which certified that additional safety requirements to upgrade the NPP Mochovce to Western standards were carried out.

As the SR tried to obtain an EBRD credit to finance the completion of the NPP Unit 1 the Austrian government succeeded to block the allocation of this credit. This was in fact a step in the negative direction for Austrian's safety concerns as from now on SR was not more bound to the strict EBRD conditions and control for upgrading the safety of the NPP. Austria even appealed to the EU Commission and EU Parliament and Austria's politicians engaged themselves as quasi-religious missionaries in the fight for a nuclear free Central Europe ("Die Presse 29.5.1998") supported by an almost paranoid attitude of the Austrian population and media against nuclear.

The situation escalated as anti-nuclear activist groups such as Greenpeace or Global 2000 even occupied the Slovak Embassy in Vienna on May 22,1998 demanding "all technical documents on Mochovce" from the Slovak

Government (Standard 23.5.1998) , the Slovak Government referred them to the supplying companies. Members of the government created FAF even warned at this stage of a “Super GAU” (= beyond design basis accident) in Mochovce (Kurier 25.5.1998). The closer the initial criticality of the NPP Mochovce approached the more irrational actions were carried out by anti-nuclear activist and even by Austrian governmental representatives.

For example the Slovak Republic was warned by the then Austrian Chancellor Klima that the safety of Mochovce could play an important role in Austria’s support for the EU accession of the SR (Kurier 27.5.1998). With the request for further discussions and additional documents, Austria wanted to delay initial criticality which was countered by SR that all relevant documents had been handed out and any further discussion must be under the coordination of the IAEA, the highest nuclear authority. Finally on June 9th 1998 the headline of the Kronen Zeitung announced “*The lethal reactor is switched on, danger is growing now from day to day*”. Strongly supported by the Kronen Zeitung on June 11 one of the largest demonstrations against Mochovce with about 100.000 participants took place in Vienna.

During the initial start-up of any NPP a large number of test are carried out, some of them resulting in a reactor shut down, any of these procedures were classified as a serious reactor accident in Austria’s media with the appropriate resonance in public. (Krone 10.6.1998 “*The lethal reactor is already defect during start-up*”). Strangely enough a few weeks later it was found that Austrian companies supplied several components and systems to the NPP Mochovce.

About a year later on October 25th, 1999 the Austrian Ambassador Ms Gabriele Matzner in Bratislava heavily criticized the Austrian anti-nuclear politic against SR (Standard 16.11.1999)

- “*Contradictory remarks of Austrian government officials weaken the Austrian position*”
- *Austria was internationally not able to prove the danger of NPP Bohunice and Mochovce*
- *It seems that Austria’s anti-nuclear politic is mainly politically and medially oriented*
- *Slovak impression is that Austria cannot be satisfied except with the closure of all NPP’s*”

The final part of the NPP Mochovce story is well characterised by the Kurier headline of December 2nd, 1999 which says “*In front of the rubble of Austria’s anti-nuclear policy*”, the NPP Unit 2 was made critical on December 1st 1999 without any major Austrian anti-nuclear activities.

4. The Temelin Case

4.1. Background

The controversy over the Temelín nuclear power plant in the Czech Republic was transformed from a domestic issue to an international one by the beginning of 1990s. Temelín represented a test for nuclear power interests across Europe. During the communist era, Czechoslovakia experienced a high energy intensity, low energy prices, and inefficient energy production and electricity transmission, all of which distorted the economy. Because the Czech heavy industry and chemical production required a reliable supply of electricity, nuclear power seemed to be a viable alternative that was consistent with the communist model of building large projects.

Temelín is located in the southern part of the Czech Republic, near the city of Ceske Budejovice, approximately 60 kilometers north from the Austrian border. The decision for construction was approved in 1978, based on the deal between the then Czechoslovakia and the Soviet Union on the support in building the nuclear power plant with the output 4×1000 MWe. The project started in 1981, the design phase was finished in 1984 and construction works began in 1986. After the political changes in 1989 the decision was taken to stop the construction of unit 3 and 4. In the following years the completion and start-up of unit 1 and 2 was the subject of intensive political conflict of interest with many players taking part.

4.2 The early years 1978 – 1988

First contacts and the preparation of the first treaty between Czechoslovakia and Austria was established in the late 70-ies. Before the signature two Czech officials were sent to the USSR for consultation. A bilateral contract was signed on November 18th 1982, which came into force on June 1st 1984. It was really a pioneer treaty in Europe between countries with different political systems and attitude to nuclear power. After this contract similar treaties between Hungary - Austria, GDR - Denmark, USSR - Finland and others followed.

This bilateral treaty was first applied to all four Dukovany units. The originally character of this treaty was bilateral information exchange between the two partners. As Zwentendorf failed the only information flow was from the Czech to the Austrian side. This period was nicknamed the "Schmidt - Beranek" era, since these two government officials played an important role in the smooth application of the treaty with a minimum of conflicts. However this period ended for two reasons:

- political changes in the former Czechoslovakia created a more open and transparent environment which was misused by various antinuclear organizations
- the above mentioned gentlemen were excluded from bilateral contracts.
- a new bilateral treaty, which was a result of the Chernobyl accident and a more aggressive attitude on the Austrian side. Into this time belongs the Bohunice V-1, the Mochovce and the Temelin case.
- The Bohunice discussions started by a meeting between Calfa and Vranitzky in 1990

4.3. The years 1988 to 1990

Already before the fall of the communist regime there were politically relevant critical voices against the plant. They came mostly from nearby Austria, the attitude of various Austrian political forces remained critical during the 1990s. The Austrian position towards Temelín is influenced by its proximity to the plant and the fact that it is a non nuclear state. Already in 1988 the Czech Press Agency (CTK) covered the visit of Austrian Chancellor Vranitzky to Czechoslovakia by the article citing an Austrian newspaper (Neue Arbeiterzeitung NAZ) , trying to contain domestic critical voices pointing out the difficult if not impossible implementation of their claims: *“Visions of the opposition that Austria could prompt neighboring state to abandon nuclear energy, or ultimately request the suspension of the construction of the nuclear power plant Temelín, can be suitable for propaganda, however, they are not politically realistic. Moreover it is not possible according to international law.”*

A campaign against Temelín was started in Austria in the spring 1989. Chancellor Vranitzky obtained a memorandum promoting economical tools to stop the construction. Thanks to that the Temelín case attracted the attention of the media already in the end of the 1980s. Czechoslovakia at that time usually responded by challenging the correctness of information on which the Austrian critics based their attitude. At the same time Czechoslovakia was ready to provide documents for the participation of Austrian experts in the assessment of the plant.

The fall of the communist regime in November 1989 opened perceived opportunities for the anti-Temelín policy both for Austrian NGOs and political representation. Already in December 1989 Austrian Greenpeace visited Czechoslovakia to point out the Temelín case. The main points of the Greenpeace press conference held in Prague were perceived negative consequences of the plant construction, uselessness of the plant and also predicted rise of cost in the future. Next day the Austrian minister of environment linked for the press the fall of the communist regime with the opportunity to get rid of all communist relicts including Temelín and nuclear

energy in general. By the end of the year the Austrian press informed several times about negative attitudes of various political representatives towards Temelín and called the visit of Greenpeace a success saying that the campaign will have a long-term effect.

The Austrian pressure continued in the following month and years. The Czech side on the other hand tried to explain and justify the construction of the unit 1 and 2. Negative impact of coal power plants in the North Bohemia served as the main argument for Temelín. The Czech side constantly declared its willingness to inform Austrian partners, to negotiate and to open the doors for an international assessment of the plant. Already on October 25th, 1989 the bilateral agreement between the Czechoslovak and Austrian government dealing with the issues of mutual interest in the field of nuclear safety and radiation protection was signed.

Temelín as the biggest constructed nuclear power plant in Central Europe became the symbol of anti nuclear protest and a broad anti-Temelín coalition formed step by step in Austria. At the end of 1990 for example the District Governor of Upper Austria (Landeshauptmann) announced the foundation of a new anti nuclear organization and supported the publication of 40.000 brochures describing the danger of nuclear energy. The Provincial Assembly of Upper Austria (Landtag) recommended that the Austrian government propose to the EU the conversion of Temelín to a gas powered plant, offering an Austrian loan to pay for it. It also established a fund to finance activities to stop the Temelín construction. Austrians claimed that it would be too expensive to bring Temelín into compliance with the EU nuclear standards, making the plant unprofitable. Upper Austria stationed a permanent representative in Prague to channel information about the safety and the cost to the Czech and Austrian governments.

4.4. The years 1991 to 1995

A 1990 an analysis by the IAEA found design flaws in the VVER 1000/320 and recommended changes, for example the replacement of the Instrumentation and Control system and the core. The decision was taken by the investor (CEZ utility) to organize a new, comprehensive re-assessment of the design (safety and operational aspects), the availability of equipment and the system supplier (mainly from former USSR contracts), and economic viability in order to obtain inputs for the final consideration of the whole project. A quite extensive „third party review“ component brought a considerably transparency into the decision process (IAEA, Haliburton NUSS, etc.).

In March 1993 ČEZ awarded the respective contract to Westinghouse. Before the US credit by the Exim bank to Westinghouse for upgrading Temelín was considered, Austrian officials began lobbying against the Temelín in the US congress.

By early 1994 an Austrian delegation coordinated by the Director of the Austrian Energy Agency (Energieverwertungsagentur EVA) M.Heindler traveled to Washington to urge the US Government to block a multi-billion credit by the Exim bank to Westinghouse for upgrading the Temelin NPP. The letter from Heindler to the Director of the NRC, Mr.Ivan Selin, was answered by the NRC on March 18th, 1994, where Selin bluntly answered that the Temelin question can only be solved directly between Austria and the Czech Republic and Austria should not try to transfer this problem into a problem between the USA and the Czech Republic. Selin further accused Heindler of misstatements in letters distributed to the US Vice President Al Gore, to Members of Congress and other high level US Government officials which he, Selin, will clarify in the same way. Selin further confirmed that the NPP Temelin together with the Westinghouse refurbishment is the most modern and safest NPP's among the WWER 1000 plants. The whole mission ended up in a disgrace which was not published in Austria's media for understandable reasons as the costs of this mission were about 170 k\$ and the FAF representatives were coldly reflected by the US counterparts (Umwelt 5/1994).

Austria asked that an Environmental Impact Assessment (EIA) with public comment be made. The Czech government argued that it was covered by the assessment in 1980s.

It was mainly towards the peak of the Mochovce discussions that also the Austrian public started to realize that at another NPP site at Temelin in the Czech Republic (CR) (licensed for four 1000 MWe NPP type WWER 1000/320) preparations are taking place to finalise at least 2 of the originally planned 4 NNP's of original Soviet design. Now that the battle against Mochovce was practically lost, Temelin entered in the focus of the media and immediately all political parties, all newspapers and all anti-nuclear groups activated all their capabilities to prevent that the NPP Temelin goes into operation.

In the first half of 90ties the discussion on Temelín in the CR was held more or less only on technical and economical level, it never became a major issue of domestic politics or a theme of elections. In contrast, since late 80ties a broad anti-Temelín coalition was step by step formed in Austria, one of the pre-requisites of the later dispute could be identified even at this moment. The nature of discussion was totally different on each side of the border.

Some arguments on the Czech side were:

- Additional 2000 MWe will allow the closure of coal plants in order to meet the criteria of the „Clean Air Act“ from 1992
- In mid- and long term perspective the power consumption will increase in the Czech Republic
- The level of safety is significantly (visible) increased by design changes
- A diversification of energy supplies and an improved energy mix (at that time gas and oil was exclusively imported from the former Soviet Union territory) is necessary for the Czech Republic

Some arguments on the Austrian side were:

- Application of „EU safety standards“ would increase the cost, the project will never pay off
- The plant design safety should be reviewed based on German safety standards
- Electricity from the NPP Temelín is not needed, any future increase of demand for electricity supplies can be easily compensated by savings
- This project never went through a standard EIA process with free public access
- The plant could be easily converted to a gas fired plant and Austria would offer credits for financing

Both sides concentrated mainly on the domestic scene, in regular bilateral discussions held under the Agreement on Exchange of Information in the Nuclear Area the issue of Temelín was never escalated, both sides operated on this working level, repeatedly explaining their contrary positions. Almost the same procedure was applied at the political level, the CR was continuing to implement the original communication strategy

4.5 The years 1996 to 2000

Throughout 1998 and 1999 there were threatening gestures that the Austrian opposition to Temelín would be linked to the Czech accession to the EU. The pressure from the Province of Upper Austria on the Austrian government increased as Temelín neared completion and Upper Austria asked the Federal Government to reopen intensive talks with the Czechs. The basis of the Austrian position was that states bordering a country with nuclear power plants have a right to be concerned about safety. In addition the Austrians wanted German standards as a measure as the EU lacks nuclear standards other than for radiation protection and transport of nuclear materials.

It is also important to note that the accession of the new EU Member States (including the Czech Republic) was much closer than during the Mochovce case and Austria's Government planned to veto the EU accession of the CR if Temelin is put into operation. Therefore Temelin was elevated to a problem of international dimension effecting the whole EU.

Furthermore this was also the booming period of internet information development and the Temelin public information centre placed all day to day events of the pre-start up- and start-up progress into the web including a chat room. Instead of using and interpreting qualified technical information it was completely misused by the Austrian media and any minor problem was inflated to a major incident. This is a typical example that too much information cannot be properly handled by media especially if their attitude is predominantly negative,

In addition during this period major internal changes took place in Austria as the SPOe lost the federal elections in November 2000 and a new coalition government between the OeVP and the right wing Austrian Freedom Party (FPOe) took over in February 2001. This created another international uproar and triggered the well known EU sanctions against Austria which lasted approximately one year.

By 2000, the Austrian position was complicated because of the nature of its coalition government. The far right Austrian Freedom Party (FPOe), headed by Joerg Haider, was vehemently opposed to Temelin, as was the Austrian Vice-Chancellor Susanne Riess-Passer (FPOe), who compared Temelin to Chernobyl because of unpredictable risks associated with nuclear power plants. If Haider pulled out of the coalition shared with Chancellor Wolfgang Schüssel's centre-right People's Party (OeVP), the government could fall. All four political parties opposed Temelin, but it was the populist and xenophobic stance of the FPOe that threatened to prevent Czech accession to the EU. In addition, Austria is a federal state with provinces that have their own governments and legislatures. Both the provinces of Upper Austria and of Lower Austria have taken independent actions in efforts to influence the federal government and working with Austrian and international environmental NGO's opposed to Temelin. Upper Austrian Greens wanted direct contact with Czech officials and argued that Temelin should be closed pending a new environmental impact assessment (EIA). These two facts are very important to understand Austria's reactions to the Czech intention to put the NPP Temelin into operation.

The SPOe was strictly anti-nuclear and now used its new opposition role together with the growing Green Party to urge the OeVP-FPOe Government to use all EU possibilities against Temelin, in addition the FPOe expected an

increase of supporters by a very strong anti-Temelin policy. The OeVP - although anti-nuclear - tried not to follow a strict confrontation path against CR and to continue the long term good relations with the Czech neighbour. Therefore bilateral negotiations on technical and political matters were started with the above mentioned FAF as Austrian technical counterpart and representatives from the Federal Chancellery as political counterparts.

Since early 2000, under the pressure of the imminent first fuel loading to Temelín unit No.1, political discussions took a high drift, the aim of these hectic political consultations was to calm down the situation to a normal dialogue, nevertheless without any visible result

To give some examples of the involved negotiators during this period a list of some major meetings follow:

- 11 and 12 July 2000, visit of Erhard Busek, Austrian representative for EU enlargement, to Prague, meeting with Pavel Telička, State Secretary of the Czech Ministry for foreign affairs, responsible for EU accession negotiations
- 28 July 2000, meeting of Czech Prime Minister Miloš Zeman and Chairman of Austrian Parliament Heinz Fischer (SPOe)
- 30 August 2000, during the conference in Alpbach Pavel Telička discussed the topic with Benita Ferrero-Waldner, Austrias Foreign Minister
- 2 September 2000, extraordinary bilateral meeting under the governmental information exchange agreement, requested by the Austrian side; list of more than 100 detailed questions sent only a week in advance
- September 2000, official visit of a group of Czech Members of Parliament in Vienna, arrangement for the visit of Austrian MPs to the Temelín power plant was made
- 23 September 2000 meeting of environmental ministers Miloš Kužvart and Wilhelm Molterer (Minister of Labour and Commerce) in Mikulov; environmental impact assessment for Temelín and some of Austrian safety concerns were discussed
- 27 September 2000 talk between Pavel Telička and Secretary General of Austrian Foreign Ministry Albert Rohan in Vienna
- 4 October 2000, visit of the group of Austrian Members of Parliament at the Temelín power plant (less than a week before Unit 1 start up), detailed discussion and plant walk down, including containment
- 16 October 2000 visit of the Chairman of the Czech Parliament Václav Klaus to Vienna, discussion with Heinz Fischer Chairman of Austrian Parliament and Austrian Chancellor Wolfgang Schüssel
- 24 October 2000, discussion of Jan Kavan, Wolfgang Schüssel and Heinz Fischer on the occasion of signature of the governmental accord concerning compensation of Czech citizens forced to work on Austrian territory during the 2nd world war

During the numerous meeting and talks (a complete list is not possible to compile as there were many meetings on various other occasions and on various levels) in Autumn 2000; there were sincere attempts from both sides to bring the situation to a normal dialogue between two neighbouring countries, nevertheless without any visible result. Therefore it was necessary to ask the EU for intervention and to organize high level meetings in Melk and Brussels.

Austria's strategy for opposing Temelín was to involve other European states and international NGOs and to provide information to various publics. This strategy also involved launching a campaign against nuclear power in Eastern and Western Europe – making the issue greater than Temelín – a position of the Social Democrats. Austrian political representation agreed, stating that “Europeanizing” Temelín will be the only way leading to EU standards for nuclear power stations’. In September 2000, the Austrian Parliament approved a resolution asking their government to block Czech entry into the EU because of Temelín. There was a demand that Temelín comply with safety standards valid in EU states. However, there exists no EU competency for nuclear power plant regulation, probably because a number of the nuclear states, including France and the United Kingdom, are cautious of opening a Pandora's box of regulatory debates. In fact, EU member states (and publics) remain quite divided on nuclear power issues. Seven of the 15 old member states have nuclear power plants, and eight of the 12 new members and candidate states are nuclear. On the other hand, countries such as Austria have totally banned nuclear power while Sweden and Germany are officially engaged in phasing out their nuclear power facilities. As a result, there is a lack of agreement among the member states about both the future of nuclear power in the EU as well as standards of safety. Austria wanted criteria to be developed and applied to all EU nuclear power plants.

In October 2000, when Temelín became critical, Austria moved to widen the controversy to Brussels. Austrian officials argued that states should have a role in protecting their citizens from an environmental disaster originating in another state. It was a position the EU could take seriously. So far Austria had no legitimate political role in the launching of Temelín or receiving assurances that it would be safe. Although there is another Czech nuclear power plant at Dukovany, it was easier to oppose Temelín than advocate the closing of an existing nuclear plant. In the autumn of 2000, anti-Temelín forces set up blockades on the borders between the Czech Republic and Austria to increase public attention on the issue. The Czech reaction was that the blockades impinged on trade and free movement of persons – the protests themselves were not the problem. The FPOe lobbied hard to get the government to withhold approval of the Czech energy chapter. The SPOe disagreed, arguing that neighbors should not be held hostage over nuclear power safety issues and suggested that Austria find allies in the EU interested in seeking unified safety standards for the entire EU. Austria soon changed its strategy from demanding

the closure of Temelín, to blocking the closing of the Czech energy chapter in the accession negotiations – the FPOe position. This move could have jeopardized the entire accession process, since a veto of any of the 31 chapters by even a single EU member state would prevent accession to the EU. When Czech officials decided to go ahead with the completion of Temelín, they never thought the issue would rise to the level of potentially blocking Czech accession to the EU. The veto of one state could do so, which is what Austrian officials were threatening.

In the Czech Republic media and public closely followed both escalation in the cross border communication with Austria and in the individual steps of the commissioning of Temelín Unit 1. The public opinion in the CR increased to (unrealistic) 80 percent in favor of putting both Temelín units to operation. This situation eliminated any room for domestic anti nuclear activists and political representatives opposing the project. Some of the across border comments sent by the highest CR political representatives had „nasty“ a flavor.

What was the result? First of all there was total communication brake down between two the neighboring states both on political and expert level. Both sides set up a “only total win“ strategy. The media coverage was extensive – but mostly presenting sensations and of course to large extent supporting different political interests. There was practically no room for any serious technical discussion. Temelín became the first NPP to be started in the „live broadcast“ – with all negative consequences.

The technical discussions followed more or less the arguments already well known from the Mochovce discussion on a larger scale with the request of additional documents, facility visits, international expertise etc. The Czech counterparts represented by the Regulatory Body, the Research Centre Rez and representatives from the NPP continued to supply the requested material hoping that ultimately the FAF would be satisfied. But to the contrary the information supplied by the CR was used only to find additional arguments against the safety of the NPP which was happily diffused by Austrian media claiming that Temelin is already a “scrap reactor” before starting up.

In spite of the overall political and medial anti-nuclear atmosphere in Austria there were still a few nuclear scientists mainly from the Zwentendorf period and from the University of Technology Vienna who tried to convince the political parties to move away from mass hysteria and anti-nuclear phobia to basic technical issues. However letters to politicians and to newspapers, TV recorded positive statements or technical manuscripts quietly disappeared, they were never published to a larger audience, several anti nuclear groups requested to send those outdated nuclear professionals into early retirement. The CR

counterparts were positively impressed to have at least one group of serious counterparts in Austria who were not under the control of anti-nuclear activists.

These pro-nuclear efforts did not help to resolve the bilateral problems and therefore the situation between both countries was frozen: Austria requested an immediate stop of all work at the NPP, the CR insisted that the NPP Temelin fulfils all safety requirements which have been verified by the IAEA and therefore will put the NPP into operation. NGOs engaged in anti-Temelin activity in Germany and in Austria, while political parties and regional governments became increasingly vocal.

Now it was time that on the political platform together with the EU a new initiative started. As mediator the EU Commissioner for EU Enlargement Günter Verheugen tried to bring the parties together to find a way out from the dead end road.

Owing to the impact of highway blockades between Austria and the Czech Republic and the emergence of the issue of nuclear safety as part of the accession negotiations, the EU became an important player. Mediating between two states that do not have equal status – one a member state and the other a candidate state – was a new role for the EU. Questions surfaced regarding whether it was, in fact, an appropriate role for the EU or whether the matter should have been left to bilateral resolution between the Czech Republic and Austria. In reality, however, bilateral negotiations were not proving successful even though the foreign ministers of the two countries seemed to share the same perspective. At the request of the Czech foreign minister, Jan Kavan, the EU Commission offered its good services to act as mediator at the end of 2000, when the Austrian blockades caused heightened diplomatic tensions. It was becoming increasingly difficult for the Austrian government to control the emotional demonstrations. Both Austria and the Czech Republic agreed to the mediation. Diplomatic contacts between the governments increased and it was agreed that the two heads of state would meet in December 2000. The result was the Melk Agreement, the result of many hours of tedious negotiation (Melk, Austria is the location where the agreement was signed). On December 12th, 2000 an agreement was signed between the Republic of Austria and the Czech Republic (Melk Protocol) covering the following subjects:

- The Czech Republic agrees to an extension of the Environmental Impact Assessment (EIA) according to Western standards
- The Czech Republic agrees to an direct and early information system of any incident at the NPP Temelin
- The Czech Republic agrees that Austria sets up a monitoring station near the NPP

- A closer cooperation between the two countries on energy research, efficiency improvements and renewable energy systems was agreed
- Both countries agreed to the free transfer of people and goods between the two countries
- Both countries agreed to support the enlargement of the EU

However, NGOs opposing Temelín were shocked when EU Enlargement Commissioner Gunter Verheugen suggested that Temelín would ‘probably be the safest nuclear plant in Europe’. The enlargement negotiations provided an opportunity to focus on nuclear power safety. The Melk Process was undertaken specifically to examine nuclear safety issues and facilitate an exchange of information about Temelín. EU Commission President Romano Prodi rejected Austrian threats to hold up Czech accession. ‘Veto should only be used if vital interests of a country are at stake’. He acknowledged the critical role of the Commission in mediating the conflict and was concerned that the controversy could become quite serious. German Foreign Minister Joschka Fischer agreed, arguing against any ‘artificial’ delays in the enlargement process because of Temelín.

Together with the European Commission safety relevant issues were discussed, an overall EIA for the NPP open to all citizens of Czech Republic, Austria and Germany was agreed upon and the safety of all NPP in candidate countries will be investigated by special EU working group

The full text of the Melk Protocol can be found in

<http://www.umweltbundesamt.at/umweltschutz/kernenergie/akw/temelin/etemelk/>

(In reality, the EU became officially involved earlier in July 2000, when the Enlargement Group of the Committee of Permanent Representatives of the Council (COREPER) charged the Atomic Questions Group (AQG) – a permanent Council body – to prepare a position concerning ‘a high level of nuclear safety in the candidate countries’. Many prior European Councils had encouraged high levels of nuclear safety. In the absence of competence for energy and, more specifically, nuclear power in the acquis, legislation covering nuclear safety, except for levels of ionizing radiation, transportation of nuclear fuel, and emergency preparedness derived from the Euratom Treaty and IAEA agreements, does not exist. While it was agreed that the EU would monitor Temelín until the accession of the Czech Republic, the position of the EU was that the responsibility for safe operations of a nuclear plant belonged to the country where the facility was located. The result of these efforts was a ‘non-paper’ by AQG to COREPER in July 2001 that describes non-binding or ‘soft’ laws based on voluntary cooperation among EU nuclear states. Owing to the

historical differences in their nuclear regulatory procedures and installations, these states strongly support only general rules of safety. The report also reviewed all nuclear candidate states. Enlargement negotiations provided an opportunity to focus on nuclear power safety.)

4.6. The years 2001 to 2005

The Melk Agreement started some movement towards a future settlement of the dispute, but emotions on both sides accompanied the whole process of its implementation and both sides still kept their original strategy (full closure versus full operation).

While there were hearings and meetings in both countries, the Melk Process did not proceed smoothly. Czech Environmental Minister Milos Kuzvart doubted that the new EIA could be completed by May 2001, as agreed to in the Melk Agreement. Rudi Anschober, Upper Austria Green Party leader, wanted the Temelín plant to close while the review took place. The Commission on the Assessment of Environmental Impact of the Temelín NPP released its report on July 31st 2001, based on its assessment of nuclear safety at Temelín as part of the Melk Process, and utilizing the Directive on Environment Assessment of Public and Private Projects No. 85/337/EEC and No. 97/11/EC. The members of the Commission included four Czechs, two representatives from the EU, and observers from Germany and Austria. The Melk Protocol established this expert body to assist in identifying safety issues. Normally an EIA is done before a project is started. Although the EIA was guided by existing EU legislation, this was a special case because it was retroactive. The actual document was prepared by the Czech Environmental Ministry. The Commission concluded that the environmental impacts were considered to be insignificant and acceptable. Between February 2001 and July 2001, in a parallel process, there were ongoing discussions between the EU, Czech nuclear experts and Austria.

Some of the many technical meetings under the Chapter IV of the Melk Agreement (Nuclear Safety) are listed below:

- 2 February 2001 in Vienna, full day meeting, experts from Czech Republic, Austria and EC, detailed list of Austrian safety concerns (based on the questions already raised and answered to various level of detail during the bilateral meeting in September 2000) was reduced to 29 topics.
- 15 and 16 March 2001, above mentioned topics were explained by the Czech experts during the workshop in Prague, most of the topics were left for further bilateral clarification (were not of much relevance for EC experts)
- 14 and 15 May 2001, Brussels, expert meeting, drafting of the report
- 30 May 2001, Brussels, short final meeting to clarify some points of

- report, Austrian representatives clearly disappointed with EC facilitation
- 30 July 2001, commissioner Verheugen sent the report to PM Zeman and Chancellor Schüssel.

Twenty-nine issues of Austrian technical concerns were identified and addressed by the Czech Republic, however trilateral nuclear safety expert discussions showed a large disagreement of opinions and failed to reach a consensus report. The main problems in these trilateral „safety discussion“ were:

- No possibility to employ „standard procedures“ for safety justification/review in this type of exercise,
- An unrealistically wide agenda – 29 safety issues of different nature were filed by the Austrian side for the discussion, no procedure was identified to eliminate these demands in a „fair“ way,
- One problem was to agree on safety criteria (standards) ,
- No procedure was available for arbitration in case the experts have different opinion on particular technical solutions .

Austrian political representation as well as environmental groups said that the Czechs did not provide sufficient documentation. As a result, one hearing in May 2001 was postponed. There were unpleasant words between the Czech Minister of Industry and Trade (MIT) Miroslav Gregr, who said Austrian demands were ‘*nonsense*’, and Upper Austria Governor Josef Puehringer, who called Gregr ‘*ignorant*’. Jan Kavan, the Czech Foreign Minister, told critics, ‘*We would shut down Temelín only if it were objectively proved that it does not comply with fundamental safety criteria*’.

Also during this period in the Federal State of Upper Austria and especially in the area near the Czech border being closest to Temelin the population started several times to occupy the main border station between Austria and Czech Republic and also organised anti-nuclear information campaigns across the border in the Czech Republic , Czech technical specialist were invited to the city of Linz for a public hearing (December 1st, 2000) which was attended by anti-Temelin activists and had to be interrupted due to hysterical outcries, shouting and insulting. A similar meeting took place at the Vienna Hofburg on June 26, 2001 with police intervention and disordered interruption. The State of Upper Austria also hired a former Czech citizen to organize the states anti-nuclear activities. These activities even continue on a smaller scale today and all the transit road are full of anti-Temelin posters, a very unfriendly welcome to Czech tourist guests.

At the same time, Temelín again suffered turbine problems that worried the Austrians, who again called for a ‘zero variant’ – consideration of an option

closing Temelín. The German Environment Minister Juergen Trittin, also a longtime opponent of Temelín, asked for the closing of the plant. More demonstrations were threatened by the Upper Austrian Greens. Austrian Finance Minister Karl-Heinz Grasser said the Czech Republic should abandon Temelín while Austrian and German Greens called upon EU countries to boycott electricity from the plant. Upper Austrian Commissioner for Nuclear Facilities Bordering Austria, Radko Pavlovec, said the Commission's report was deficient. The FPÖe reaction was that the document was a provocation. Chancellor Schuessel asked the Czechs for more information. Lower Austria said the documentation about crisis scenarios was deficient and that Temelín constituted a real threat to countries neighboring the Czech Republic. The Czech Foreign Ministry responded by asking if the Austrians were questioning the sovereign right of the Czechs to determine their own energy policy. The Czechs did agree to respond to the 'zero option' and provided additional information. This, however, did not satisfy the governors of Upper Austria, Lower Austria and Salzburg, who announced that they would file a lawsuit for potential damages. German Environment Minister Trittin pulled out of the meetings on Temelín to disassociate himself from any conclusions of the Commission report. Environmental NGOs argued that the EIA failed to consider a crash of an airplane or the method of disposal of stored radioactive waste.

Austria submitted a report to COREPER criticizing the shortcomings of nuclear plants in candidate countries, including the Czech Republic and Slovakia, making nuclear safety an issue for consideration of the EU accession. However, Enlargement Commissioner Guenther Verheugen, who brokered the Melk Agreement, warned that Austria could not prevent the construction of a nuclear power plant in a neighboring country. The Czech Foreign Minister Jan Kavan indicated that he understood the concerns of the Germans and the Austrians because of their closeness to Temelín, stating, *'We perceive the fears of our neighbors' citizens as understandable, but because we do not feel them justified, we will do everything to dispel them and assure the people that the plant is safe'*. Austrian Greens interpreted the remarks as sympathetic to their cause – that building a nuclear plant close to borders is unacceptable. Some Austrian Temelín opponents suggested giving the Czech Republic money to close the plant or purchase the plant.

There also was a suggestion of an international conference to discuss the possibilities of closing the plant. Chancellor Schuessel asked EU President Romano Prodi to make Temelín a European issue as a means for leading the way to EU standards for nuclear power plants. Upper Austria's Governor agreed, stating that this was not a bilateral problem with the Czech Republic. Austrian Greens maintained that Temelín was a European problem and should be resolved at a European level. A serious accident would affect not only Austria, but all of Europe. Commissioner Verheugen said there would not be an

international conference unless the Czechs supported it, which they did not. The opponents argued that keeping the Czechs outside EU reduced the opportunity to make the plant safer, since Temelín would probably go online anyway. Schuessel concluded by playing his trump card, stating that the energy chapter would not be closed until 'all safety and environment aspects of the Temelín nuclear power plant are assessed'.

The European Parliament, a strong supporter of environmental issues, passed a draft resolution in July 2001, recommending the phasing out of Temelín and hosting an international conference on the issue. It tried to convince the European Commission that Temelín was a failed investment. At the September 2001 plenary session of the Parliament, it was suggested that the EU finance the closure and dismantling costs of Temelín. The plenary session also advocated increased use of sustainable energy sources. This position was supported by all Austrian parties. The non-binding resolution was passed on October 5th, 2001, recommending that as problems continue to come to light in the nuclear and non-nuclear section of the plant, the 'zero option' should be considered. Resolution supporters hoped that the Commission would consider the Parliament's position seriously. This was the first time an EU institution tied Temelín to accession.

During 2001 many meetings of political and technical representatives of both countries took place to solve open questions. For example Verheugen stated in October 2001 that the 29 safety issues mentioned above will not have any effect on the Czech Republic accession, Austria tried desperately to unify the non-NPP EU countries and bring the EU to a stronger anti-nuclear policy, as response the EU stated in October 20th, 2001 that Austria is poisoning the climate in the EU with the on-going anti-nuclear policy. Interestingly enough in that period it was calculated that Austria is quietly consuming nuclear originating electricity in some areas up to 37% (Kurier 15.10.2001).

Austria was in the awkward position of criticizing the EU for lacking uniform nuclear energy standards, while demanding that Temelín comply with safety standards valid in EU countries. Since there are no EU standards, which national standards should apply. German, French and British standards are not the same. Czechs officials argued that the EU could not apply pressure to candidate states about nuclear power because it lacked the competency to do so with existing members. However, the EU position was that it could force an EIA on non-members even though it was not called for in EU legislation.

Further it was well known with insiders that several Austrian companies were under contract with Temelín and supplied safety related and security related equipment, this was however never public admitted by Austrian politicians.

In November the 29 open questions concerning nuclear safety of Temelín were reduced to 7 open questions. Chancellor Schüssel tried to remove the Temelin question from Austrian internal politics towards the end of 2001, the Czech Republic Foreign Minister stated that the Melk process must not be part of accession negotiations and Prodi warned not to inflate a bilateral conflict into a multilateral conflict (Kurier 10.11.2001). A few moderate journalists declared in public that a technical issue has been inflated to an emotional issue already during the Vranitzky government with his policy of an “atom-free central Europe” and called Schüssel for a return (Presse 24.11.2001). In the same direction the Kurier (26.11.2001) declared that Austria seems to follow an anti-nuclear missionary drive and it’s tunnel view is only concentrated on Temelin although there are many other and major issues to be solved. There was obviously a slight opinion change with some of the serious journalists. The Temelin issue was reduced to a legal issue how to produce a bilateral binding contract in agreement with the Melk Protocol on the open safety issues. Hectic high level negotiations were carried out between the involved parties. Finally on November 29, 2001 a trilateral agreement was signed in Brussels (Brussels Protocol) between the Czech Republic , Austria and the EU represented by Verheugen which can be found in

http://www.umweltbundesamt.at/fileadmin/site/umweltthemen/kernenergie/temelin/Roadmap/Br_ssel/bruessel_eng.pdf

The conclusions of the Melk and Brussel Process issued on November 29, 2001, defined a follow-up process. Each state recognized the sovereign right to its own energy policy, but there would be joint monitoring and cooperation to increase energy efficiency. In late November 2001, Chancellor Schuessel changed his position regarding closing the Czech energy chapter.

The Austrian Foreign Minister Benita Ferrero-Waldner implied that the energy chapter could be reopened, but she did not receive support from other foreign ministers. The Austrian Parliament passed a resolution giving it the right to reopen it in the future. This, however, would be highly unusual requiring the support of the Commission, which was supporting the Czech position. However, the Austrian Vice-Chancellor, Susanne Riess-Passer (FPOe) still maintained that Austria take a stronger stand without fear of being isolated in the EU.

This Brussels Protocol created an uproar with the three not involved parties FPOe, SPOe and Greens as they were not involved in the negotiations, especially as the FPOe was in preparation of an anti-Temelin referendum in January 2002.

Why did Austria finally abandon a veto of Czech accession?

- First, Austria lacked support in the EU Council.
- Second, Chancellor Schuessel risked jeopardizing the strength of his coalition in a long, difficult and unpleasant fight. Having just recently been isolated by EU bodies and member states following the inclusion of Haider's right-wing FPÖ in the government, Austrian officials were loath to risk being the 'outsider' again and being subject to reprisals in the European Council.
- EU Commission President Prodi rejected demands for safety guarantees at the EU level.
- There was no legal basis for stopping Temelín.
- Finally, the proposed conference on nuclear power at the EU level was rejected by the Commission, as it was deferred to the Czech Republic.

Looking back into 2001 during this one year period Austria's internal politics were almost completely blocked with the Temelín issue, the discussion how to handle this problem increased to a political crisis which almost broke up the Austrian coalition government. Four parties were involved which were the ÖVP, the SPÖ, the FPÖ and the Green Party. ÖVP and FPÖ formed the coalition government while SPÖ and the Green Party were in opposition. The Chancellor (ÖVP) tried to keep the EU-accession question out of the Temelín case while the coalition partner wanted to veto the Czech Republic accession if Temelín starts up, the FPÖ party leader organised a public referendum to support his politics which was carried out in January 2002 with less than the expected votes. SPÖ and Greens did not support the accession veto but wanted to delay the EU accession of the CR until all Austrian requirements have been settled. There were even proposals for financial compensation from Austria to the Czech Republic if Temelín was not put into operation.

5. Present Situation

In April 2002, the Provincial Government of Upper Austria brought suit against CEZ in an Austrian court. The court rejected the claim saying it did not have the right to rule because the Czech Republic was sovereign – possessing the right to make decisions concerning its own territory, the Upper Austrian Government has appealed however.

These factors give rise to the need for an examination of 'sovereignty' and the relationship between EU and member states and candidate states. The Temelín case also casts doubt on the effectiveness of the veto, if a vetoing state risks isolation and accompanying retribution.

At the December 2002 Copenhagen Summit, at which the CEE states were invited to join the EU, Austrian officials wanted to embed a protocol to the accession treaty with the Czech Republic making the Melk Protocol subject to

international law and subject to enforcement by the European Court of Justice. Lacking an EU nuclear energy policy and given the influence of the nuclear states, the attempt failed. Nuclear member states may have feared that such a move might put other nuclear power plants under European Court jurisdiction with possible lawsuits initiated by antinuclear groups. However, Austrian right- and left-wing parties argued that without enforcement mechanisms, the Melk Agreement was meaningless.

Chancellor Wolfgang Schuessel and Prime Minister Vladimir Spidla did agree on a declaration to be attached to the Czech Accession Treaty pledging the fulfillment of the Melk Agreement. It remains a bilateral agreement and not subject to international law. However, all the long term measures will have a „legal basis“ in the revised Bilateral Agreement for exchange of information in the nuclear area, The Czech regulator as well as the operator clearly declared their willingness to keep the Austrian partners updated on any development related to safety of nuclear installations on Czech territory including all safety topics selected for discussion during the implementation of Brussels conclusions.

5. Final remarks

Trying to settle down the Temelin case, both sides learned that in a certain political environment to say OK to a nuclear project may be considered as „suicide“, and that representatives coming from such environment have a quite limited potential for any compromise. It is difficult for technical experts to be engaged in a debate where partners have such limitations. How to distinguish between a technical and a political debate? For media, there is no strict division, general public is not willing to study carefully individual modalities and interest groups - intentionally or not - are balancing between these two positions.

The Melk process again proved the exclusive position of a national regulator: beside the applicant / license holder it is practically the only institution where the complex knowledge of a particular safety case is located. Any third party reviews (even the IAEA missions) can cover only particular issues, but not the whole safety case, however the reviews are quite valuable in the overall context. In the present case the partner regulator in Austria was missing, any substitution by particular groups such as the FAF proved to be quite difficult.

For the regulator it is necessary to repeat explanations of basis principles, how the safety is managed in discussion with the general public, with politicians, with the media and with interest groups. In any emotional situation such as in the Temelin case, almost none of the standard rules for communication could be applied. One of the problem is that „fairy tales“ are still told about safe

„western“ and unsafe „eastern“ nuclear power plants or about a „European Safety Standard“ far higher than in other countries - politicians and media just love such simplifications!

The past decades placed a heavy strain on the Austrian-Czech relations and at several occasions political arguments were used which had nothing to do with the nuclear issue but originated as far back as World War II. The EU sanctions against Austria in 2001 and the EU accession of the Czech Republic complicated the issue even more.

Only a few media presented the process as serious attempt to settle this cross border dispute – others were just looking for sensations. Many politicians and interest groups were trying to profit of this situation, the public was supplied by inconsistent information of dubious quality throughout the process, „serious“ players in the game had real difficulties to convey their message in this heated environment

What are finally the benefits of the process for both countries? There is a good basis established for further de-escalation of the nuclear issue, the discussion was reflected down to the expert level and leaves only one main task for the political representatives – monitoring, and finally there is clearly positive message to the general public: we can talk together.

Looking back to almost 20 years of bilateral conflicts on nuclear issues which were temporarily raised to an European issue it is obvious that political solutions can only be found under the condition that the involved politicians on both sides do not use this issue as a possibility for their national political ambitions. Complicated technical matters cannot be discussed in the media or with the general public in full extent and complexity, detailed technical discussion have to be carried out on an expert level. Finally it is of high importance that the politicians and the experts on both sides agree on a positive attitude and keep emotions away from the negotiations.