1.0 ASSESSMENT OF THE STRUCTURE OF NATIONAL ACTION PLAN

1.1 Compliance of the national action plan with the ENSREG Action Plan:

In setting up the action plan Germany combined nationally established regulatory procedures and actions plans of the competent Länder authorities with the proposed template for the NAcP and therefore did not precisely follow the Structure proposed by ENSREG for the National Action Plan. The German National Action Plan instead chose a format which described the post-Fukushima national safety review programme and its outputs, thus defining the action plan issues, and then demonstrated how this correlates with the National EU-Stress Test results and the ENSREG and CNS aspects. The findings from the follow-up plant visits were also addressed.

1.2 Adequacy of the information supplied, taking into account the guidance provided by ENSREG.

As indicated above, Germany modified the structure proposed by the ENSREG guidance. However the tables give a clear description of how the ENSREG, CNS and National Review outputs have been addressed by the national safety review programme. The tabular format enables extensive information to be presented for both the ENSREG and CNS guidance and for the power plant specific reviews and measures already completed, being undertaken or to be implemented.

2.0 ASSESSMENT OF THE CONTENT OF NATIONAL ACTION PLAN

2.1 How has the country addressed the recommendations of the ENSREG Action Plan?

The National Action Plan for Germany uses two Tables in the report (6-1 and 6-2) to show how all of the activities are applied in a series of nationally identified actions, defined in Table 4-1. Table 4-1 and 4-2 together represent the complete action plan for the German NPPs. Table 4-2 identifies which actions are applied at each NPP, including shutdown NPP as well as operating plants. Although Tables 6-1 and 6-2, and their cross references to table 4-1, are very detailed, some of the ENSREG recommendations are not easily traceable.

The Reactor Safety Commission (RSK) produced a series of documents including its initial safety review, which was supplemented by two statements and further recommenda-
tions. In parallel, the technical support organization (GRS) to the Federal Ministry (BMU) also produced an Information Notice. The recommendations together with the information notice defined the National Action Plan with plant specific implementation. The German power plant operators organization (VGB) also undertook analysis to review the robustness of the NPPs.

2.2. Schedule of the implementation of the NAcP

Tables 4-1 and 4-2 which make up the action plan identify that many of activities were completed in 2012. Many more are to be completed in 2013, and a small number of items and studies will be completed at identified NPPs in 2014. Many activities are studies which may result in further improvements. These will be implemented within the normal regulatory oversight processes.

The report identifies a number of further studies being undertaken by RSK which have not yet concluded or are in preparation, including extreme weather conditions, seismic design, toxic gases and commercial airplane crash, some of which are in scope of the Stress Test. Similarly the German Commission on Radiological Protection (SSK) is currently re-assessing the existing regulations for emergency preparedness, in a programme of work scheduled to complete in 2015. Finally, some answers to ENSREG recommendations (e.g. E-8, E-9, E-10, E-11 and E-19) although partially implemented before Fukushima, need further clarification of the schedule.

2.3 Transparency of the NAcP and of the process of the implementation of the tasks identified within it

The NAcP provides clear and comprehensive information on how the robustness of NPPs in Germany will further be reinforced in the aftermath of Fukushima according to the recommendations and suggestions of the European Stress Tests and the conclusions of the CNS process. The NAcP is accessible on the regulator’s website.

2.4 Commendable aspects (good practices, experiences, interesting approaches) and challenges

The clear programme of work at each NPP and the completion of the majority of the proposed activities in 2013 demonstrate a strong commitment to further reinforce the robustness of German NPPs in the light of the events at Fukushima.

The Tables also demonstrate that many items of generic improvement identified in the light of the events at Fukushima, had already been undertaken at the German NPPs or were already underway.

The peer review discussions identified that there may be a need for further clarity on how the plans will be fully developed and reported when the relevant studies and consulta-
tions are complete as well as how their implementation will be reported in a consistent manner.

3.0 PEER-REVIEW CONCLUSIONS

Germany’s NAcP provides clear and comprehensive information on how the robustness of NPPs will be further reinforced in the aftermath of Fukushima according to the recommendations and suggestions of the European Stress Tests and the conclusions of the CNS process, although some of the activities are not easy to fully understand among the tables. The report is accessible on the internet in both English and German.

Many measures have already been completed at the NPPs, either after the Chernobyl accident (for example filtered containment venting, passive autocatalytic recombiners or nitrogen inertization for BWRs, accident procedures such as primary and secondary feed and bleed), or in 2011/2012 (for example mobile diesel generator equipment). Some of the remaining identified activities and studies will be completed in 2013, with some left to be carried over to 2014/2015.

The German NAcP has identified that further work is ongoing in some technical areas which are relevant to the Stress Test. These have been generated by the Reactor Safety Commission (RSK), but no schedule is identified due to on-going consultations.

Germany could develop further its plans for reporting the completion and closure of the full scope of work identified as a result of the Stress Tests and the more general post-Fukushima activities identified nationally.

Germany’s NPPs already included significant enhancements to robustness ahead of the Fukushima events and resulting Stress Test, including filtered containment venting and passive autocatalytic recombiners. The plans for further improvements, analysis, and studies are clear and comprehensive, but the plans for publishing the completion of the full scope of work identified as a result of the events at Fukushima could be developed further.