One-day workshop on
“Rifting systems and its significance for hydrocarbon exploration in the Netherlands”
Organised by EBN and TNO Geo-Energy
5 June 2008, Utrecht

Date : Thursday June 5th 2008
Time : 9.30 – 18.00
Venue : Auditorium of TNO-NITG,
Princetonlaan 6, Utrecht
(route map on www.nitg.tno)

Pre-registration costs : Euro 50
On-site registration: Euro 100
Included : Proceedings, Lunch and Social drinks
Registration : TNO
Business Unit Geo-Energy, TNO
by tel : 030 256 4610
by fax : 030 256 4605 (or e-mail : mailto: Organisatie-BenO-SecretariaatGEenGI@tno.nl

Background
With the improving subsurface imaging of geological structures, with new 3D acquisition and computer aided imaging tools, it becomes increasingly clear that trapping and accumulation of hydrocarbons in the Netherlands is more complex than earlier realized.

Understanding of the subsurface geology in the Netherlands requires understanding of polyphase tectonic events, driven by large scale plate movement and related rifting.

Understanding of the processes related to rifting are important to understand structural style and subsidence and can be of importance for the seismic interpreter, the explorationist, the development geologist but also the basin modeller.

The North Sea is generally seen as an example of a rifted basin. The Netherlands are an integral part of this basin and forms the complex transition of the North Sea rift system to the German Rhine Graben system. Unfortunately, our current lack of understanding on the geological controls of the rifting processes and its effect on small scale structuration, results in a sub-optimal exploration wells or reservoir development. This symposium aims to fill a number of gaps in our knowledge. The workshop will touch on the mega-tectonic setting but will also highlight a number of detailed examples. The presentations will in particular illustrate a number of rift induced structural styles in the Netherlands.

Workshop format and content
During this year’s workshop organized by EBN and TNO we want to share some insights into the latest views on the geological processes and related structuration related to rifting.

Understanding the implications of rifting models allows new play concepts to be developed in areas previously considered unattractive. The new insights are not only important during the exploration phase, but can be also very important when making the development plan.

You will hear state of the art opinions on the mega tectonic setting. Operators active in the Netherlands will highlight some of these problems by presenting case studies.

Subsequently, some speakers will address the geological context of uncertainties related to basin modeling.

Examples of questions to be answered are:
- What areas are affected most in the Netherlands?
- Which stratigraphical formations are to be studied and mapped
- What is the structural style to be expected

Primary target group
Geologists and geophysicists involved in the exploration and exploitation in the deeper subsurface of the Netherlands
Program Schedule

Coffee  9.30  Registration

Session 1
10.00  Welcome (TNO/EBN)
10.05  JAN DE JAGER (Shell - Rijswijk) – Rifting systems in the Netherlands and exploration – setting the scene
10.20  FRED BEEKMAN (Vrije Universiteit Amsterdam) – Post-rift fault reactivation in the Netherlands
10.40  Questions/discussion
10.50  RICHARD RIJKERS (Gaz de France - Zoetermeer) – Structural development and sealing faults in the Central K&L blocks in the Netherlands
11.10  Questions/discussion

Coffee  11.20

Session 2
11.50  JAN DIDERIK VAN WEES (TNO) – Tectonic heat flow modelling for basin maturation: Methods and applications
12.10  Questions/discussion
12.20  Kees van Oijik (NAM - Assen) – The evolution of an hydrocarbon habitat system in Early Triassic sediments in the Vlieland Basin, offshore Netherlands, in response to Kimmerian rifting events
12.40  Questions/discussion

Lunch  12.50

Session 3
13.30  HERALD LIGTENBERG (NAM - Assen) – Examples of structural development related to rifting in the Netherlands
13.50  Questions/discussion
14.00  FOKKO VAN HULTEN - HEERLEN/ JO VAN BUGGENUM (EBN/WINTERSHALL- RIJSWIJK) – A 3D geological model of the Dutch Central Graben
14.20  Questions/discussion

Tea  14.30

Session 4
14.50  BERNARD GEISS (Total – Mariahoeve) – Late charge problems in the K5 area
15.10  Questions/discussion
15.20  HANNEKE VERWEIJ (TNO- Utrecht) – Impact of rifting on fluid migration in the Netherlands
15.40  Questions/discussion

Panel Discussion
15.50  Are the effects of late movements, related to rifting, underestimated?
16.45  Closing Remarks

Drinks 16.50