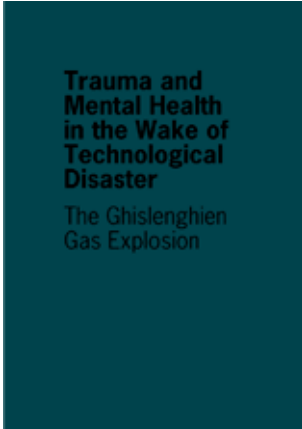


**Recente publicaties – Publications récentes**

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**TRAUMA AND MENTAL HEALTH IN THE WAKE OF THE TECHNOLOGICAL DISASTER: THE GHISLENGHIEN GAS EXPLOSION**

**MAJOR ERIK DESOIR**

A gas explosion in Ghislenghien (Belgium, July 2004) instantly killed five firefighters, one police officer and 18 civilians. Moreover, 132 people were wounded and many of them suffered severe burn injuries.

This book aims at clarifying the impact of a technological disaster, both phenomenologically and empirically. It also wishes to enhance the understanding of the challenges for psychological help in the wake of technological disaster.

On the phenomenological side, the experiences of a disaster survivor are used to set the stage for a discussion on the conceptual differences between mainstream (Anglo-Saxon) trauma theories and the more classical (French) psychodynamic theories. Three chapters provide contextual information on the trauma inflicted by a massive explosion.

On the empirical side, the focus is on the prevalence of posttraumatic stress symptoms in adult and child survivors of a massive gas explosion, in their family members as well as in family members of deceased victims. Four chapters provide a quantitative approach of trauma-related mental health disturbances in adults and children after a technological disaster.

The results clearly indicate the influence of the degree of exposure, peritraumatic dissociation and dissatisfaction with social support on the development of posttraumatic stress symptoms. The risk for the development of four types of mental health disturbances (somatization, depression, anxiety and sleeping disturbances) was much higher in direct witnesses who have seen human damage. The epilogue discusses possible future developments for early psychophysiological stabilization of disaster victims.



**VEILIGHEID & STRATEGIE N° 120<sup>1</sup>**  
**CIVIEL GEBRUIK VAN KERNENERGIE EN MILITAI-**  
**RE PROLIFERATIE: ACTOREN EN BELANGEN**  
**KAPITEIN-COMMANDANT VAN HET VLEGWEZEN**  
**BART SMEDTS**

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The future of nuclear power is still a matter of debate that extends beyond economical arguments and technical feasibility: a combination of economic, technological, but also (geo-) political arguments are to be considered. The trend to purchase commercial off the shelf equipment in the nuclear field, increases de facto the depend-

ency from private companies, manufacturers and innovators in that domain. Politically and economically, the tendency to reduce nuclear power after the Fukushima disaster in the West is counterbalanced by increased demand from emerging countries and equally in some Middle Eastern countries: it is however questionable whether it is wise to install nuclear energy in countries with an unstable geostrategic environment when alternative solutions are possible in both traditional and renewable forms. The choice to sell the technology in those instances is often gain-driven but also holds political bargain. Indeed, the case study of Iran demonstrates that political and geostrategic reasons are not negligible in the debate. The huge investments for new power plants constitute a burden which at first sight seems unbearable even for Western economies unless smaller scale projects are considered in the future and/or a stable economic environment can be guaranteed to potential investors. However, considered over the entire operational time of a nuclear power plant, this is not the case.

The political dimension stresses the importance of supranational organisations in the debate. The EU holds a guiding and supporting role for the regulation of nuclear power. Both the nature of the dual use material as well as the actors involved within the EU (nuclear weapon states) complicate even more the inextricable link between the commercial and non-commercial nuclear roles. NATO holds on to the non-conventional role for the time being. Turkey, a NATO country bordering the Middle-East, is just one example of difficult times to come in the negotiations for a Weapons of Mass Destruction Free Zone in the area. The agenda of the Review Conference of the Nuclear Non-Proliferation Treaty will therefore very soon be supplemented by concrete operational verification issues in that region.

The nuclear sector in Belgium still holds an important potential for the years to come: our country is still dependent on the output of endogen nuclear capacity. With or without nuclear future in the long run, huge investments will be needed, for example in distribution networks, even with renewable resources. At best our country could exploit the resources and know how at its disposal which will both be needed domestically or abroad. The presence or withdrawal of a non-conventional NATO arsenal should not be a unilateral decision in any country of the alliance but it could be decided not to be forced to purchase a very specific capacity only to be able to support a non-conventional role: an alternative could be to constitute a multilateral force to that specific aim. As far as the position of Belgium's government on non-proliferation and disarmament is concerned, the Charter of the United Nations as well as NATO's strategic concept remain the main guidelines.

<sup>1</sup> Opmerking met betrekking tot de editie 10 van het BMT : de daarin voorgestelde studie van M. André Dumoulin draagt het Nr 121 ipv 120



## **FOCUS PAPER N° 32<sup>2</sup>**

### **NUCLEAR DISARMAMENT: HEDGING FOR BETTER OR WORSE**

**KAPITEIN-COMMANDANT VAN HET VliegWEZEN  
BART SMEDTS**

Starting from the the hypothesis that nuclear disarmament would succeed in diminishing the total amount of nuclear weapons, it is worth trying to establish the consequence and the dynamics for both military and civilian applications. It is probable that the nuclear technology would be reduced to an embryonic state, comparable to what can be observed today in Iran.

What until recently was the Iranian nuclear puzzle is therefore the ideal case-study to identify the parameters influencing the dynamics driving the embryonic state towards either a full-fledged military program or a civilian and peaceful counterpart. The most probable scenario in that embryonic state would be a hedging posture for both civilian and military applications. That assumption allows for the examination of drivers for the hypothesis to materialise, what might be the consequences, who are the actors involved and which mechanism could be able to curb eventual worst case scenarios. For each one of the possible outcomes, recommendations are at hand that can benefit policy makers to avoid worst case scenarios

<sup>2</sup> Opmerking met betrekking tot de editie 10 van het BMT : de daarin voorgestelde focus paper van M. Gauthier Wery draagt het Nr 33 ipv 32



## FOCUS PAPER N° 34

### LA VIABILITÉ DES FRONTIÈRES AFRICAINES AU REGARD DES REVENDICATIONS D'ORDRE IDENTITAIRE : LES EXEMPLES DE BAKASSI ET DE L'AZAWAD

MME. DÉBORAH GUIDEZ

Au lendemain des indépendances africaines, les premiers chefs d'État ont opté pour le maintien des frontières issues de l'ère coloniale afin de se prémunir contre l'instabilité qui découlerait d'une reconfiguration territoriale. Pour autant, l'Afrique a connu un certain nombre de litiges frontaliers.

Qu'ils soient interétatiques ou sécessionnistes, ces différends contribuent à porter atteinte à l'« intangibilité » des frontières prônée par les organisations intergouvernementales africaines. Une lecture fréquemment proposée a consisté à expliquer leur persistance par le caractère arbitraire des frontières du continent.

L'étude s'intéresse aux litiges résultant des revendications d'ordre identitaire. Indépendamment des causes explicatives suggérées, certains des conflits recensés ont en effet fait appel au facteur identitaire, dès lors que celui-ci se trouve mobilisé par les acteurs concernés. Deux études de cas viennent illustrer l'analyse. La première concerne Bakassi, péninsule qui fut au centre des rivalités entre le Nigeria et le Cameroun. La seconde s'intéresse aux velléités sécessionnistes des Touareg résidant au Mali.

L'étude des facteurs contribuant à l'émergence des revendications à caractère identitaire, appuyée par l'analyse des cas illustratifs, cherche ainsi à répondre aux questions suivantes : les frontières africaines, telles qu'elles ont été établies, jouent-elles un rôle dans l'émergence de tels conflits ? De même, en considération des rares modifications de tracés qui ont été effectuées, disposent-elles d'une faculté de résolution d'un différend ? Enfin, sont-elles appelées à durer, « intangibles » si l'on s'en réfère au lexique employé par l'Union africaine ?



**DOCTORAATSTHESIS**  
**TOWARDS AN ADEQUATE REGULATORY FRAME-  
WORK FOR BACTERIOPHAGE THERAPY**  
**MR. GILBERT VERBEKE**

De resistentie van bacteriën tegenover antibiotica neemt alsmaar toe. Jaarlijks sterven er in Europa 25.000 inwoners aan dit probleem. De industrie heeft momenteel weinig of géén nieuwe antibiotica in de pijplijn. Vóór de farmaceutische ontwikkeling van de antibiotica werden o.a. natuurlijke bacteriofagen (= bacteriële virussen) als antibacterieel middel gecommercialiseerd en gebruikt. Deze the-

rapeutische toepassing van natuurlijke bacteriofagen werd “bacteriofaag-therapie” genoemd. Ook vandaag nog wordt bacteriofaag-therapie toegepast in landen als Polen, Georgië en Rusland. De Europese Unie en de “moderne” geneeskunde als dusdanig heeft dringend nood aan de terugkeer van bacteriofaag-therapie als deel van haar armamentarium in de strijd tegen de bacteriële antibiotica-resistentie. Het Europese regelgevende kader dat deze terugkeer op een vlotte en relevant kwalitatieve wijze moet mogelijk maken ontbreekt momenteel. Dit doctoraal onderzoek heeft als eerste doel een geschikt Europees regelgevend kader voor te stellen zonder daarbij de aspecten van veiligheid, kwaliteit en therapeutische werkzaamheid van bacteriofagen uit het oog te verliezen.