
Examining the creation of a European Border Surveillance System (EUROSUR)

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Introduction

In its Communication of 30 November 2006 on Reinforcing the Management of the EU’s Southern Maritime Borders, the Commission proposed to establish a permanent Coastal Patrol Network for the southern maritime external borders and to create a European Surveillance System for Borders.

The European Council of 14/15 December 2006 stated that “priority will be given to examining the creation of a European Surveillance System for the southern maritime borders”.

Further to the works done for the setting up of the European Patrols Network (EPN) based on the MEDSEA study and the results of the BORTEC feasibility study, the objective of this Communication is to examine the parameters within which a European Border Surveillance System (EUROSUR), focussing initially on the southern and eastern external borders of the EU, could be developed and to suggest to Member States a roadmap for the setting up of such a system.

The aspects of this Communication dealing with surveillance of maritime external borders form part of the overall framework set by the Integrated Maritime Policy for the European Union.

As defined in the Schengen Borders Code, border control consists of checks carried out at border crossing points (border checks) and surveillance of borders between border crossing points (border surveillance). This Communication focuses on enhancing border surveillance, with the main purpose of preventing unauthorised border crossings, to counter cross-border criminality and to support measures to be taken against persons who have crossed the border illegally.

It should be seen in the context of the Schengen four-tier access control model, which includes cooperation with third countries, and contribute to improving coordination of EU policies on border control with other policies such as research and development, fisheries and transport.

Once implemented, EUROSUR would constitute a decisive step in the further gradual establishment of a common European integrated border management system. When implementing the different measures described in this Communication, the

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2 MEDSEA Feasibility study of 14 July 2006 on Mediterranean Coastal Patrols Network; prepared by FRONTEX.
3 Study on technical feasibility of establishing a surveillance system (European Surveillance System), Warsaw, presented by FRONTEX on 12 January 2007. Compare also the “Feasibility study on the control of the European Union's maritime borders” presented by CIVIPOL on 4 July 2003.
6 The Schengen access control model consists of the following four tiers: Measures at consulates, cooperation with neighbouring countries, border control, and control measures within the Schengen area, including return.
External Borders Fund should be the main solidarity mechanism for the Member States in sharing the financial burden in the European Union.

2. CHALLENGES AND OBJECTIVES FOR THE FURTHER DEVELOPMENT OF BORDER SURVEILLANCE

2.1. Challenges

2.1.1. Current surveillance infrastructure and coordination at national level

For the time being, national border surveillance systems are covering only a few, selected parts of the EU external borders. The BORTEC study has shown that in the eight Member States with external borders in the Mediterranean Sea and the southern part of the Atlantic Ocean, about 50 authorities from 30 institutions are involved in border surveillance, sometimes with parallel competencies and systems.

2.1.2. Current coverage of surveillance tools

Due to technical (current performance of radar/optical sensors, limited availability of satellites) and financial limitations, the areas covered by surveillance are currently restricted to certain flat or coastal areas and those areas of the land border or open sea in which operations are carried out.

2.1.3. Cooperation with third countries

The migration pressure presents considerable challenges not only for the Member States on the northern, but also for the third countries located on the southern shores of the Mediterranean Sea in terms of detection, apprehension, reception and further processing and readmission of migrants.

2.2. Objectives

2.2.1. Reduction of the number of illegal immigrants who manage to enter the EU undetected

The authorities responsible for border control in the Member States need to be provided with more timely and reliable information if they are to detect, identify and intercept those attempting to enter the EU illegally, thereby reducing the number of illegal immigrants who manage to cross the external borders of the EU undetected.

2.2.2. Increase internal security of the EU as a whole by contributing to the prevention of cross-border crime

Border surveillance has not only the purpose to prevent unauthorised border crossings, but also to counter cross-border crime such as the prevention of terrorism, trafficking in human beings, drug smuggling, illicit arms trafficking etc.

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Significant financial means, notably flowing from involvement in different kinds of illegal activities, and the affordability of new technical means provide groups involved in organised crime with a wide range of possibilities and equipment.

To counter these threats is first and foremost a task for the police forces and intelligence services of Member States. However, an effective border management system both at national and European level will provide a valuable tool for fighting cross-border crime.

2.2.3. Enhancing search and rescue capacity

Many illegal immigrants and persons in need of international protection are travelling in conditions of extreme hardship and are taking great personal risks in their attempts to enter the EU illegally by hiding in vehicles, on cargo vessels, etc. The recent practice of travelling on board of unseaworthy and overcrowded boats, has multiplied the number of unfortunate migrants who continue to lose their lives by drowning in the Atlantic Ocean between Africa and the Canary Islands and in the Mediterranean Sea.

The tragic death toll resulting from this kind of illegal immigration is unacceptable and must therefore be significantly reduced. The capacity to detect small boats in the open sea must be enhanced, contributing to greater chances of search and rescue and thereby saving more lives at sea. However, long-term solutions to the challenges posed by migration management can only be achieved through a comprehensive strategy that includes cooperation with third countries, also on border surveillance.

3. GENERAL CONCEPT

In order to meet the objectives identified in the previous section it is necessary to envisage a common technical framework to support Member States' authorities to act efficiently at local level, command at national level, coordinate at European level and cooperate with third countries in order to detect, identify, track and intercept persons attempting to enter the EU illegally outside border crossing points.

A European Border Surveillance System – EUROSUR - should support the Member States in reaching full situational awareness\(^8\) on the situation at their external borders and increase the reaction capability\(^9\) of their law enforcement authorities.

Such a framework would be set up without affecting the respective areas of jurisdiction of Member States nor replace any existing systems. A key operational objective should be to use information collected by different systems in a more coherent manner, while paying attention to geographical circumstances and differences between types of borders, in particular between land and maritime borders.

\(^8\) Situational awareness measures how the authorities are capable of detecting cross-border movements and finding reasoned grounds for control measures.

\(^9\) The reaction capability measures the lapse of time required to reach any cross-border movement to be controlled and also the time and the means to react adequately to unusual circumstances.
The implementation of EUROSUR should be divided into three phases, of which the first two phases would be carried out in parallel, whereas the third phase would be built upon the two previous ones.

(1) **PHASE 1**: Upgrading and extending national border surveillance systems and interlinking national infrastructures in a communication network.

(2) **PHASE 2**: Targeting research and development to improve the performance of surveillance tools and sensors (e.g. satellites, unmanned aerial vehicles / UAVs, etc.), and developing a common application of surveillance tools. A common pre-frontier intelligence picture could be developed to combine intelligence information with that obtained from surveillance tools.

(3) **PHASE 3**: All relevant data from national surveillance, new surveillance tools, European and international reporting systems and intelligence sources should be gathered, analysed and disseminated in a structured manner, to create a common information sharing environment between the relevant national authorities.

Phases 1 and 2 should cover the maritime and land external borders, having regard to changing migration patterns. Phase 3 should focus on the maritime domain, as it concerns putting together the multitude of information sources that are monitoring activities on the open seas; the equivalent challenge of monitoring such a vast space does not arise in relation to land borders. It should be noted that as far as air borders are concerned, illegal immigration by air is a matter of efficient checks at the border crossing points at airports. EUROCONTROL is working on securing the European airspace and air traffic management.

### 4. PRESENTATION OF THE DIFFERENT PHASES AND STEPS

This chapter outlines in more detail the three phases and includes the follow-up actions the Commission envisages to take, together with recommendations for action by Member States and FRONTEX. A table giving an overview of the different steps, leading up to Phase 3, is annexed.

#### 4.1. PHASE 1: Interlinking and streamlining existing surveillance systems and mechanisms at Member States level

#### 4.1.1. Step 1: Providing the essential border surveillance infrastructure at national level

In the MEDSEA and BORTEC studies and for the EPN, FRONTEX proposed to set up *National Coordination Centres* in the eight Member States forming the EU southern maritime borders in the Mediterranean Sea and in the southern Atlantic

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10 For example, to identify abroad a vessel utilised for a criminal activity and to track it by using satellites or ship reporting systems until interception on EU territory.

11 Air Traffic Management (ATM) security is concerned with securing the ATM assets and services, to prevent threats and limit their effects on the overall aviation network. Airspace security seeks to safeguard the airspace from unauthorised use, intrusion, illegal activities or any other violation.
Ocean\textsuperscript{12}. For EUROSUR, such centres should also be set up in the Member States forming the EU eastern land borders and the EU maritime borders in the Black Sea\textsuperscript{13}.

Such centres should ensure close to real-time local, regional and national decision-making among all national authorities involved in border control tasks. Such centres should have the capacity to provide situational awareness of conditions and activities along the external borders as well as all the necessary tools to react accordingly.

The national coordination centre should function as the central part of the national border surveillance system, the latter covering all or – based on a risk analysis – selected parts of the external borders of the Member State concerned.

4.1.2. \textit{Step 2: Communication network between the national coordination centres including FRONTEX}

A secured computerised communication network should be set up in order to exchange data 24 hours a day in real-time between centres in Member States as well as with FRONTEX.

FRONTEX should receive information from the national coordination centres to the extent relevant for the coordination of joint operations and for risk analysis. FRONTEX could also be involved by serving as a European Situation Centre gathering from and disseminating close to real-time information to these centres with regard to incidents occurring along the EU external borders.

4.1.3. \textit{Step 3: Support to neighbouring third countries for the setting up of border surveillance infrastructure}

As the existing cooperation mechanisms in the Baltic Sea and in the Black Sea have shown, cooperation with neighbouring third countries is a pre-requisite to achieve situational awareness in the maritime domain. While Community financial assistance is already provided to most neighbouring third countries in order to support them in managing their borders, the specific need for developing operational cooperation between those third countries and Member States calls for increased EU financial and logistical support on border surveillance.

\textbf{Recommendations}

Member States located at the southern and eastern external borders of the EU are invited to set up

- \textit{one single national co-ordination centre}, which co-ordinates 24/7 the activities of all national authorities carrying out external border control tasks (detection, identification, tracking and interception) and which is able to exchange information with the centres in other Member States and with FRONTEX;

- \textit{one single national border surveillance system}, which integrates surveillance activities at all or – based on risk analysis – selected parts of the external border

\textsuperscript{12} Portugal, Spain, France, Malta, Italy, Slovenia, Greece, Cyprus.

\textsuperscript{13} Norway, Finland, Estonia, Latvia, Lithuania, Poland, Slovakia, Hungary, Romania, Bulgaria.
and enables the dissemination of information 24/7 between all authorities involved in external border control;

- Member States are encouraged to make full use of the financial support available under the European Borders Fund for the above two actions.\textsuperscript{14}

FRONTEX should, before the end of 2008, present a risk assessment determining those parts of the external borders of the Member States which should be covered by a national surveillance system, a comparison of this assessment with the plans presented by the Member States, and a report on the existing and needed surveillance infrastructure in selected neighbouring third countries.

The Commission will set up a group of experts from Member States and FRONTEX to elaborate guidelines for the tasks of and the cooperation between the national coordination centres as well as on the role of FRONTEX.

The Commission will launch a technical study under the External Borders Fund and coordinated with other ongoing preparatory works to design the system architecture and to estimate the approximate financial costs, for land and maritime borders and including technical specifications for a secured communication network between the national coordination centres and FRONTEX, making use of existing networks where feasible. The system architecture should be flexible and adaptable to accommodate the application and use of all existing as well as future border surveillance tools (cf also Phase 2). The study will also include an analysis of how to link up EUROCONTROL with EUROSUR for the purpose of covering all relevant threats related to border surveillance in the long-term.

On this basis, the Commission will, in spring 2009,

- report to the Council on the progress made on the guidelines for the national coordination centres, and will assess the need for a legislative initiative in this regard;

- present an estimate on the approximate financial costs for the continued development of national coordination centres and national border surveillance systems;

- present a proposal for the system architecture for the communication network and an estimate of the approximate financial costs for setting it up;

- make an assessment of the border surveillance infrastructure in selected neighbouring third countries based on the evaluation carried by FRONTEX, while using as appropriate this assessment in the programming of relevant financial programmes in the external relations domain, taking into account the means available in the context of the current financial perspectives.

\textsuperscript{14} Member States can use the External Borders Fund to co-finance up to 75% of the costs. See priority 2 of the strategic guidelines for 2007 to 2013 for the External Borders Fund as laid down in Commission Decision C(2007) 3925 (OJ L 233, 5.9.2007, p. 3).
4.2. **PHASE 2: Development and implementation of common tools and applications for border surveillance at EU level**

4.2.1. **Step 4: Research and development to improve the performance of surveillance tools**

In particular two emerging tools are of interest for border surveillance purposes – satellites and UAVs. Earth observation (EO) satellites offer the possibility of coverage for much of the earth, including the open sea and third country coasts and territories. UAVs can produce detailed images and can be placed over the target area on demand.

EO satellites are useful for monitoring and intelligence gathering with regard to pre-defined areas, but are currently of limited use for tracking. In wide area searches small targets cannot be found, whereas for high resolution imagery the area swept is small and therefore the position of the target has to be known, e.g. on the basis of intelligence given.

UAVs and satellites can track a vessel in European and international waters. However, currently UAVs are not allowed to fly in civil airspace for legal and technological reasons. Extending their operation to coastal areas of third countries of departure would require appropriate agreements with those third countries. In this respect, the overall context of our relations with the third countries concerned will have to be taken into account.

4.2.2. **Step 5: Common application of surveillance tools**

The application of new surveillance tools could provide Member States’ authorities with surveillance information on their external borders and on the pre-frontier area on a more frequent, reliable and cost-efficient basis. Consideration should be given on how the EU can support Member States in developing and using such tools, with regard to investments or by setting up mechanisms allowing for a shared use of capital intensive tools such as satellites. FRONTEX could act as a facilitator e.g. to liaise with service providers in order to procure satellite imagery on behalf of several Member States or co-ordinate the sharing of equipment such as UAVs.

4.2.3. **Step 6: Common pre-frontier intelligence picture**

The deployment of new tools opens the possibility for strategic information to be gathered by FRONTEX from various sources as well as from Member States' authorities and from third countries in order to recognise patterns and analyse trends, supporting the detection of migration routes and the prediction of risks.

In practice that could serve to establish a common pre-frontier intelligence picture as a complement to the risk analyses currently developed by FRONTEX. Such a common tool could also take on a more operational character and enable a targeted intelligence reaction, coordinated via the situation centre to be set up by FRONTEX.

**Recommendations**

The 7th Framework Programme for research and development (security and space themes) should be used to improve the performance and use of surveillance tools to increase the area covered, the number of suspicious activities detected as well as to
improve the identification of potentially suspicious targets and the access to high resolution observation satellite data.

Therefore, in spring 2009, the Commission should present to the Council a concept allowing Member States to receive information derived from satellites and other common surveillance tools with regard to their external borders and the pre-frontier area on a more frequent and reliable basis in the context of GMES (Global Monitoring for Environment and Security). This concept should also include an estimate of the approximate financial costs.

In spring 2009, FRONTEX should present, in close cooperation with the GMES Bureau of the Commission, a gap analysis of the current and potential future use of satellites for border surveillance purposes by Member States in order to further define the objectives to be pursued for the common application of such tools at European level.

The Commission will launch a study under the External Borders Fund analysing the concept and approximate financial costs of a "common pre-frontier intelligence picture" and report back to the Council in spring 2009.

4.3. PHASE 3: Creation of a common monitoring and information sharing environment for the EU maritime domain

Phase 3 will focus exclusively on the maritime domain. The objective of this phase is to integrate all existing sectoral systems which are reporting and monitoring traffic and activities in sea areas under the jurisdiction of the Member States and in adjacent high seas into a broader network, thus allowing border control authorities to take advantage of the integrated use of these various systems. This network constitutes also an aim of the integrated Maritime Policy of the EU.

4.3.1. Step 7: Integrated network of reporting and surveillance systems for border control and internal security purposes covering the Mediterranean Sea, the southern Atlantic Ocean (Canary Islands) and the Black Sea

Due to the complexity of developing such a "system of systems", and taking into account the current migratory pressure, in a first step the integrated network should be limited to the areas mentioned above and focus on internal security, linking border control authorities, and other European and national authorities with security interests and responsibilities in the maritime domain together.

To this end, a Maritime Policy pilot project and preparatory action will be launched in 2008 to develop working prototypes that can help to define the appropriate technology and approximate financial costs of cooperation and information sharing between sectoral maritime authorities as well as first components of the final system.

Further actions will be taken to encourage the progressive development of an integrated network of maritime reporting and surveillance systems, in which information from different systems set up to meet European and international organisations (Vessel Monitoring System, Automatic Identification System, Long

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15 See also Annexes 10 and 12 of the impact assessment.
Range Identification and Tracking System, SafeSeaNet, etc.) as well as from national surveillance systems (e.g. SIVE, SPATIONAV, Vessel Traffic Management and Information System etc.), jointly operated surveillance services (e.g. radar satellites, UAVs), and intelligence sources are collected, fused, analysed and disseminated in a structured manner at local, Member States' or European level as appropriate.

The analysis of this data should serve to recognise patterns, analyse trends and detect anomalies and thereby predict risks. The information should be available to all national coordination centres concerned, to facilitate command and control and decision making in near-real-time.

This common environment could also cover activities such as the screening of vessels, people and cargo. Special attention has to be given to the security of these systems and tools, ensuring appropriate confidentiality, integrity and availability.

A study on the legal aspects of the envisaged interoperability of the different surveillance systems will be launched in 2008 within the framework of the EU Maritime Policy.

4.3.2. **Step 8: Integrated network of reporting and surveillance systems for the whole EU maritime domain**

As stated in the action plan\(^{16}\) accompanying the Communication on an Integrated Maritime Policy for the EU\(^{17}\), the Commission will announce in the 2\(^{nd}\) half of 2008 in the form of a Communication a work plan for further steps towards the integration of all European maritime reporting and surveillance systems. It will go beyond border related aspects, thus covering all maritime activities, such as maritime safety, protection of the marine environment, fisheries control, and law enforcement.

**Recommendations**

By 2009, the Commission should present to the Council an outline for the system architecture for an integrated network of reporting and surveillance systems for the Mediterranean Sea, the southern Atlantic Ocean (Canary Islands) and the Black Sea, which would allow border control authorities to make full use of the integrated maritime reporting and surveillance systems. This outline should take into account the results of a study to be launched under the External Borders Fund, studies carried out under the 7\(^{th}\) Framework Programme for Research and Development, as well as other relevant preparatory work done.

In the framework of the EU Maritime Policy, the Commission will also present a Communication setting out a work plan for further steps towards the integration of all European maritime reporting and surveillance systems covering all maritime activities in the Mediterranean Sea, the southern Atlantic Ocean (Canary Islands) and the Black Sea regions with a view to be extended later to the whole EU maritime domain.

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5. **PROTECTION OF PERSONAL DATA**

The different activities referred to in the previous sections may involve the processing of personal data. Thus the principles of personal data protection law applicable in the European Union are to be observed, meaning that personal data must be processed fairly and lawfully, collected for specified, explicit and legitimate purposes and not further processed in a way incompatible with those purposes. The processing of personal data within the context of EUROSUR must therefore be based on appropriate legislative measures, which define the nature of the processing and lay down appropriate safeguards.

6. **CONCLUSIONS**

– The Commission invites the Council and the European Parliament to discuss the recommendations put forward in this Communication.

– The Commission intends to launch the work on elaborating guidelines, together with the Member States, for the tasks of and the cooperation between the national coordination centres and FRONTEX immediately after having published this Communication.

– In spring 2009, the Commission will report back to the Council on progress made and present concrete proposals for the set up and launch of EUROSUR (Phases 1-3) as outlined in this Communication, including covering the complete system architecture for connecting national border surveillance systems and the common application and use of all relevant tools.

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