

France's Cyber Defense Capabilities

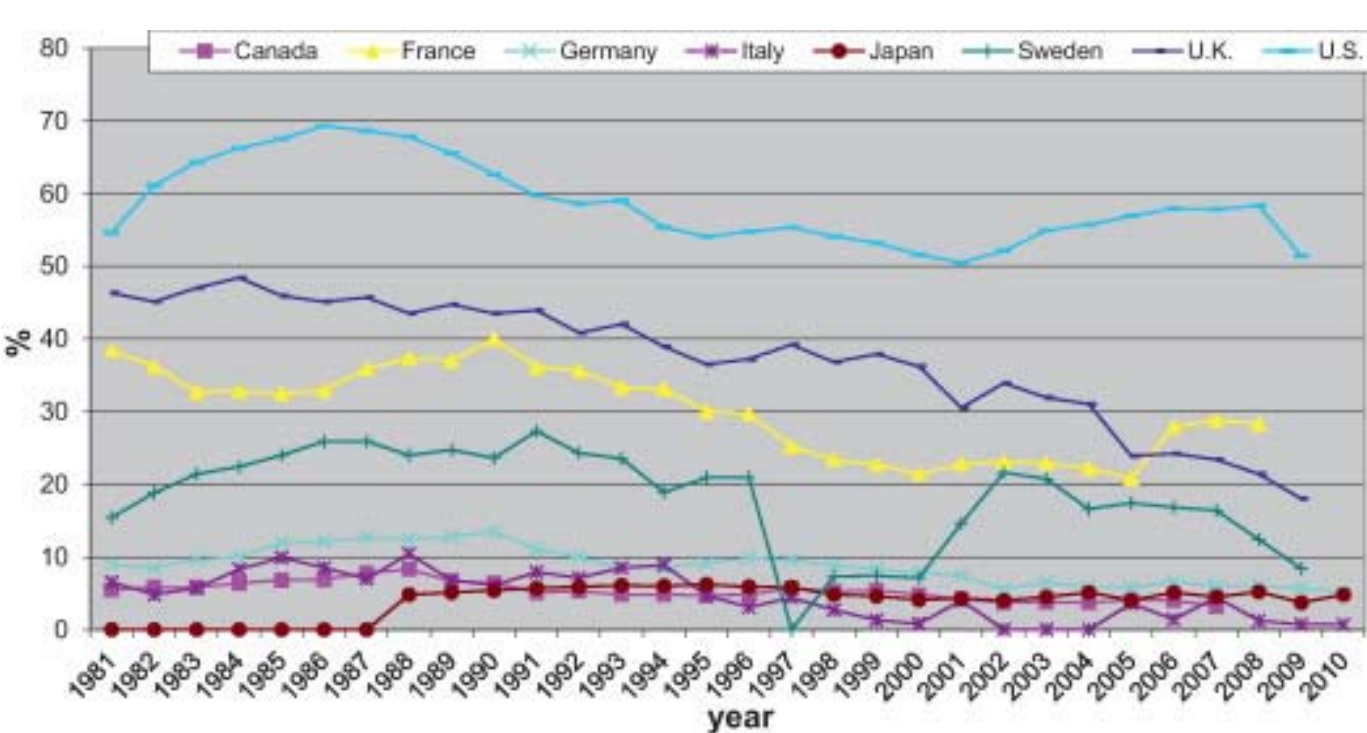
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Introduction

This report will focus on cyber defense capabilities that France is integrating into its military doctrine. The information contained is based on findings from open-source documents available through such channels as government publications, private publications, and academic papers.

Four Strategic Objectives

Become a World Power in Cyber Defense

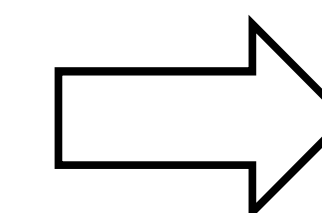


As of 2006, France has the second highest share of defense spending in the world, after the United States¹

In October 2012, France participated in the pan-European cyber exercise to foster relations between nations

Strengthen the cyber security of critical national infrastructures

FLAWS
A greater number of devices are used to connect
Administrators are reluctant to implement security measures
Off-the-shelf hardware and protocols are often used



RESPONSE
An emphasis on testing security of critical infrastructure
Utilize security tools that are found in general IT networks
Appointment of a high-level figure to oversee the implementation of security measures

Safeguard France's ability to make decisions through the protection of information related to its sovereignty

Type of Cryptography	Authorization
Small key cryptography used to authenticate or perform an integrity check	Free for use and export outside of France
Use of large cryptographic key	Must be declared
Exportation of large key cryptography	Authorization required outside of a list of states*

* List of approved states: Australia, Canada, United States of American, Japan, New Zealand, Norway, and Switzerland

Ensure security in cyberspace



Commision Nationale de l'Informatique et des Libertés sets laws to hold entities accountable for the personal information they handle. CNIL has the ability to impose warnings and fines on those that do not provide sufficient measures to protect personal data

Free access to all of the information concerning him in clear language
The ability to oppose that personal information is used for advertising or commercial purposes
The ability to correct, complete, clarify, or erase data

¹ Mowry, David C. (2012 Dec). Defense-Related R&D as a Model for "Grand Challenges" Technology Policies. *Research Policy*, 10(4), 1703-1715. <http://dx.doi.org.ezproxy.lib.purdue.edu/10.1016/j.respol.2012.03.027>