ENISA's Step-by-Step Guide to Setting up a CERT/CSIRT and its role in Establishing new CSIRTs in CIS Countries

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CEENet, ENISA PSG

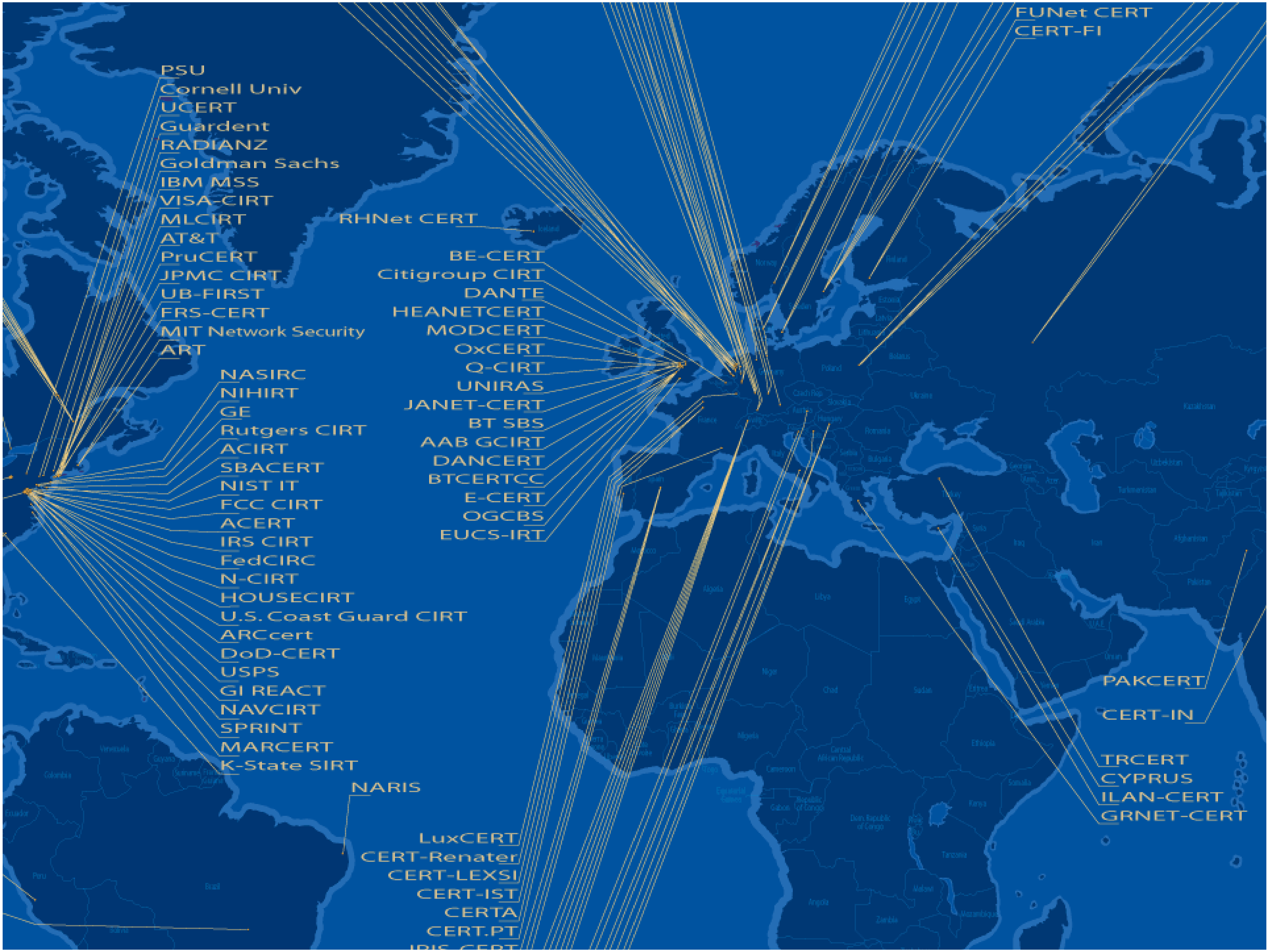
What is CEENet?

Central and Eastern European Networking Association (CEENet) is an international association of 25 national academic networks (NRENs) from CEE and CIS countries.

What is CSIRT?

- *Computer Security Incident Response Team is the service organization* ***that is responsible for receiving, reviewing, and responding to computer or*** *network security breach.*

- *Often they are also complete network security service providers, including preventative services such as alerts, security advisories, trainings, awareness raising and security management services.*


PSU
Cornell Univ
UCERT
Guardent
RADIANZ
Goldman Sachs
IBM MSS
VISA-CIRT
MLCIRT
AT&T
PruCERT
JPMC CIRT
UB-FIRST
FRS-CERT
MIT Network Security
ART
NASIRC
NIHIRT
GE
Rutgers CIRT
ACIRT
SBACERT
NIST IT
FCC CIRT
ACERT
IRS CIRT
FedCIRC
N-CIRT
HOUSECIRT
U.S. Coast Guard CIRT
ARCcert
DoD-CERT
USPS
GI REACT
NAVCIRT
SPRINT
MARCERT
K-State SIRT
NARIS
RHNet CERT
BE-CERT
Citigroup CIRT
DANTE
HEANETCERT
MODCERT
OxCERT
Q-CIRT
UNIRAS
JANET-CERT
BT SBS
AAB GCIRT
DANCERT
BTCERTCC
E-CERT
OGCBS
EUCS-IRT
LuxCERT
CERT-Renater
CERT-LEXSI
CERT-IST
CERTA
CERT.PT
IRIS-CERT
FUNet CERT
CERT-FI
PAKCERT
CERT-IN
TRCERT
CYPRUS
ILAN-CERT
GRNET-CERT

CSIRT creation project

- *In 2007 CEENet started project to create CSIRTs in CIS & CEE*
  - *AF, AM, AZ, GE, KG, KZ, TJ, TM, UZ*
  - *BY-MD-UA,*
  - *AL-BG-MK (just started)*
  - *JO, EG, TN, AL, MN, MT (planned)*
- *CSIRTs were usually created as sub-structure of Academic Network (or NGO, e.g. ISOC*)

CSIRT creation project

Each newly created CSIRT got free „starting kit”:

- *Equipment bundle:*

  CERT Server with system of incident handling software, Staff working station, router, switch, software, multi-function printer, shredder, manuals)

- ***Training of 1-3 CERT officers (based on ENISA's Step-by-Step guide and TRANSITs material)***

- *Small stipend for CERT officers in initial period of CSIRT operation*

ENISA’s Step by Step Guide

- *ENISA has created a „A Step-by-Step Guide on how to set up a CSIRT”, which on 85 pages contains detailed instructions how to set up and run CSIRT. This Guide existed in many languages (EN, FR, DE, ES)*

- *For the usage in CIS countries CEENet has translated this guide to Russian (available from ENISA)*

Guide in Russian

Пошаговое руководство по созданию CSIRT

**Включая примеры и контрольные таблицы
в форме проектного плана.**

Приложение

A. Список дополнительной литературы

B. Список CSIRT-сервисов

C. Примеры

D. Образцы материалов CSIRT-курсов

Guide in Russian

1. **О данном руководстве**
2. **Правовое уведомление**
3. **Благодарности**
5. **Общая стратегия планирования и создания CSIRT**
6. **Разработка бизнес плана**
7. **Продвижение бизнес плана**
8. **Примеры операционных и технических процедур (делопроизводство)**
9. **Обучение CSIRT**
10. **Упражнение: создание рекомендаций**
11. **Заключение**
12. **Описание Плана Проекта**

Current status

Trainings by experienced trainers from CERT-Polska and CERT-Surfnet started in 2006 with English written TRANSITs material;

From 2007 ENISA's Guide in Russian is used and trainers from AZ and GE are included.

Typically 2-5 CERT officers/NREN have been trained during 5 sessions 2xTbilisi, Vilnius, Warsaw, Skopje)

CERT-Polska is:

- *monitoring their activities, on-line support*
- *introduces them to international fora*

Current status

- *reports (Web-site set-up, plan of activities, statistics, dissemination, etc.) received from AM, BY, MD, AZ, GE, UA, UZ*

- *problems in AF, KG, KZ, TJ, TM – nature of their problems is being studied*

CERT's international cooperation in extreme situation

CERT-GE is part of GRENA. As there were no other CERT teams in Georgia, during recent events CERT-GE undertook obligation to operate as national CERT, worked two weeks in 24h mode and coordinated attacks mitigation.

CERT-GE contacted Georgian ISPs and other organizations, created a mailing list in order to facilitate communication and exchange of all needed information.

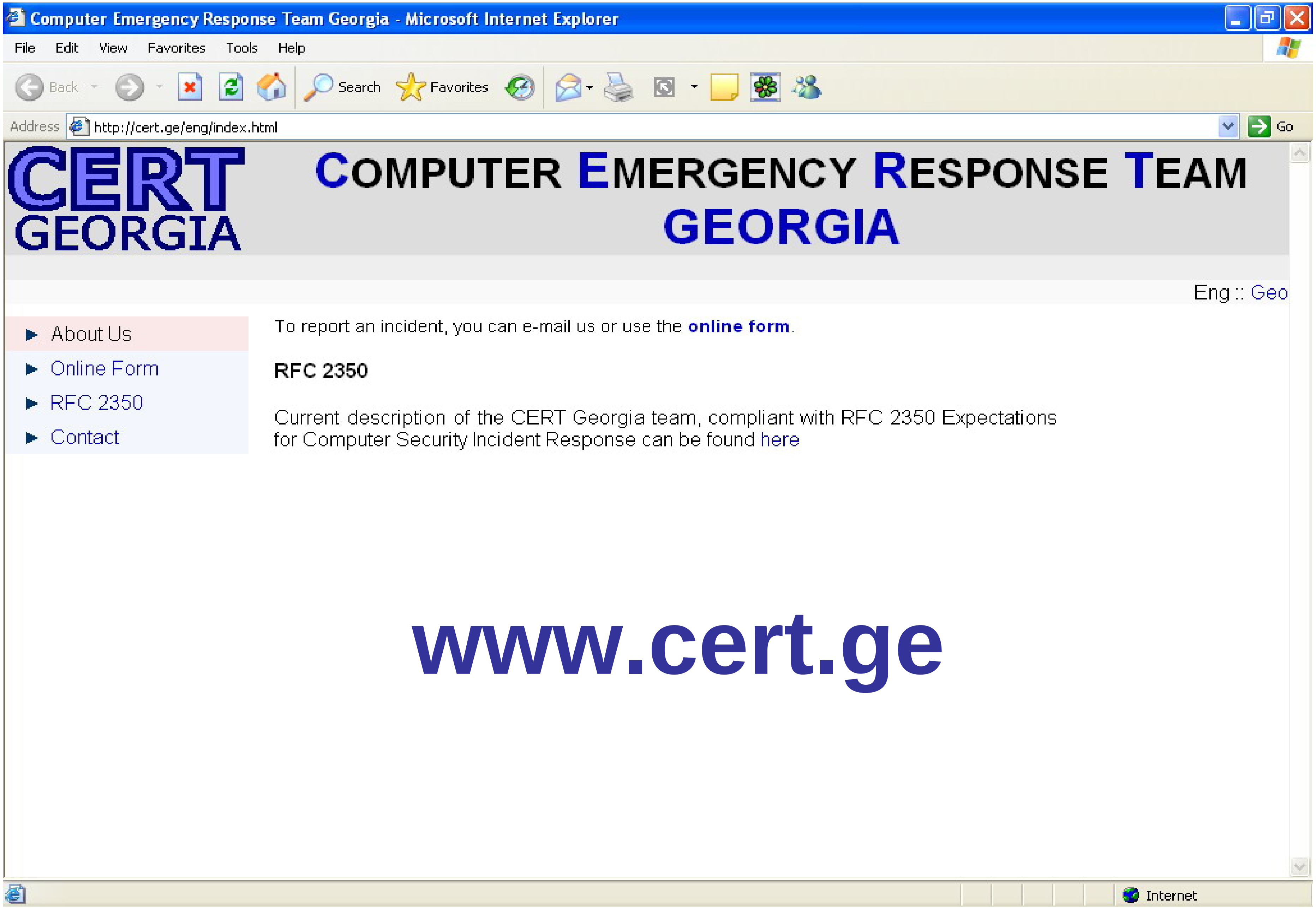
As this information was huge and geographical distribution of attacks was quite wide, it was impossible to make quick analysis and proper reaction. CERT-GE contacted CERT-Polska (Poland) which offered its help in preventing and filtering attacks; they distributed information on attacks to more than 180 CERT teams and other security related bodies all over the world. Two members of CERT-EE arrived to to Tbilisi to help on place.

This example demonstrates that the most important actions for handling incidents are quick information exchange and international cooperation between CERTs and other organizations involved in cyber security.

Contacts to CERT Georgia

- **E-mail: cert@cert.ge**
- **Tel/Fax.: +995 32 251440**
- **Web-page: http://www.cert.ge**

Mailing list was created for GRENA users
certusers@cert.ge


Computer Emergency Response Team Georgia - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
Address
http://cert.ge/eng/index.html
Go
CERT
GEORGIA
Internet

COMPUTER EMERGENCY RESPONSE TEAM GEORGIA

Eng :: Geo

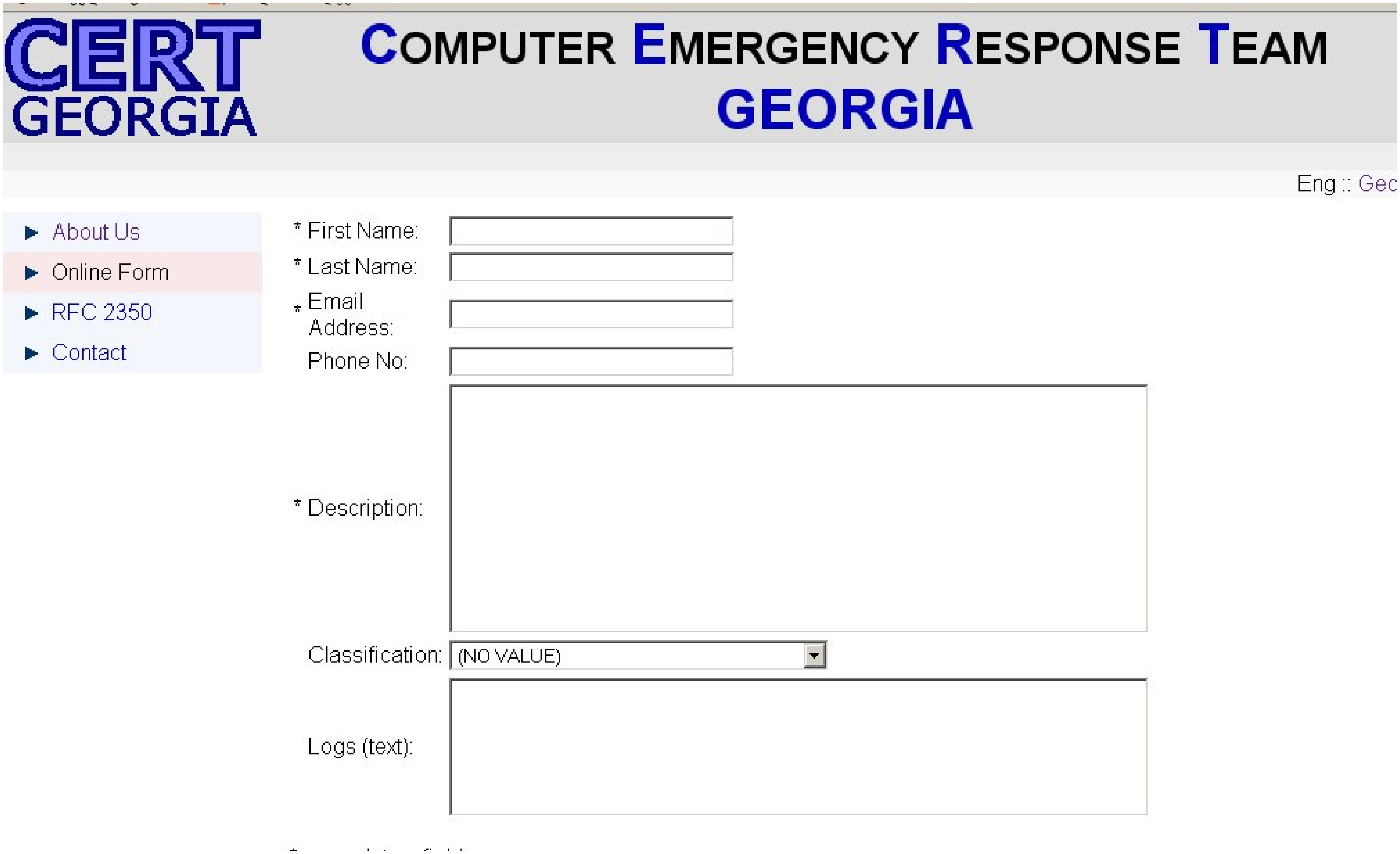
- About Us
- Online Form
- RFC 2350
- Contact

To report an incident, you can e-mail us or use the **online form**.

RFC 2350

Current description of the CERT Georgia team, compliant with RFC 2350 Expectations for Computer Security Incident Response can be found here

www.cert.ge



COMPUTER EMERGENCY RESPONSE TEAM
GEORGIA

* First Name:

* Last Name:

* Email Address:

Phone No:

* Description:

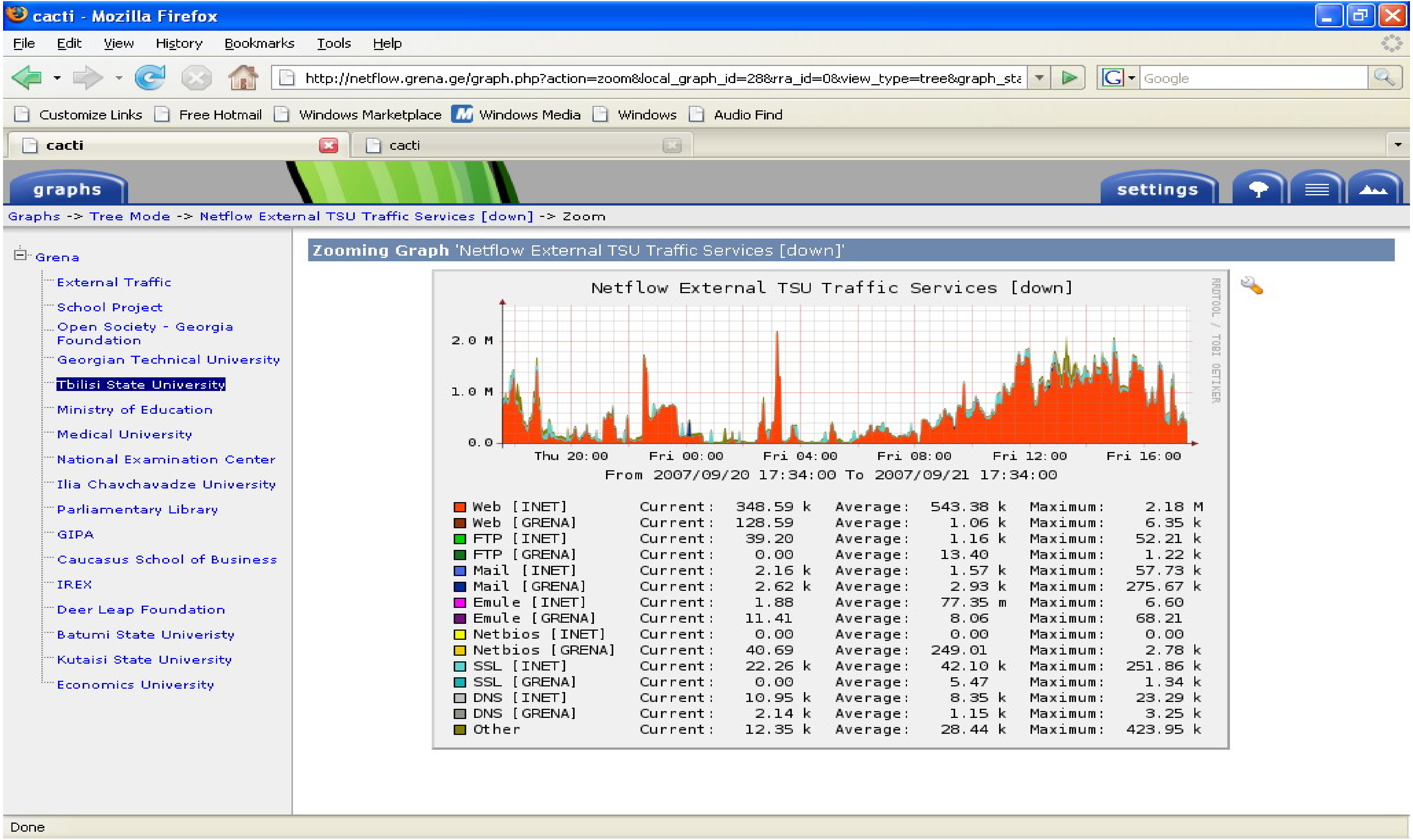
Classification: (NO VALUE)

Logs (text):

Services Provided by CERT Georgia

- Information about new viruses, worms and spams are send regularly (2 times per week) to GRENA users.
- Monitoring of the traffic by Netflow is conducted and users with traffic problems are informed.
- In case of problems our users are contacting us via e-mail or phone.

Tbilisi State University Downlink



Graphs -> Tree Mode -> Netflow External TSU Traffic Services [down] -> Zoom

- Grena
  - External Traffic
  - School Project
  - Open Society - Georgia Foundation
  - Georgian Technical University
  - Tbilisi State University
  - Ministry of Education
  - Medical University
  - National Examination Center
  - Ilia Chavchavadze University
  - Parliamentary Library
  - GIPA
  - Caucasus School of Business
  - IREX
  - Deer Leap Foundation
  - Batumi State Univeristy
  - Kutaisi State University
  - Economics University

Zooming Graph 'Netflow External TSU Traffic Services [down]'

Netflow External TSU Traffic Services [down]

From 2007/09/20 17:34:00 To 2007/09/21 17:34:00

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■ Web [INET]       Current:  348.59 k   Average:  543.38 k   Maximum:    2.18 M
■ Web [GRENA]      Current:  128.59     Average:    1.06 k   Maximum:    6.35 k
■ FTP [INET]       Current:   39.20     Average:    1.16 k   Maximum:   52.21 k
■ FTP [GRENA]      Current:    0.00     Average:   13.40     Maximum:    1.22 k
■ Mail [INET]      Current:    2.16 k   Average:    1.57 k   Maximum:   57.73 k
■ Mail [GRENA]     Current:    2.62 k   Average:    2.93 k   Maximum:  275.67 k
■ Emule [INET]     Current:    1.88     Average:   77.35 m   Maximum:    6.60
■ Emule [GRENA]    Current:   11.41     Average:    8.06     Maximum:   68.21
■ Netbios [INET]   Current:    0.00     Average:    0.00     Maximum:    0.00
■ Netbios [GRENA]  Current:   40.69     Average:  249.01     Maximum:    2.78 k
■ SSL [INET]       Current:   22.26 k   Average:   42.10 k   Maximum:  251.86 k
■ SSL [GRENA]      Current:    0.00     Average:    5.47     Maximum:    1.34 k
■ DNS [INET]       Current:   10.95 k   Average:    8.35 k   Maximum:   23.29 k
■ DNS [GRENA]      Current:    2.14 k   Average:    1.15 k   Maximum:    3.25 k
■ Other            Current:   12.35 k   Average:   28.44 k   Maximum:  423.95 k
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CERT in Turkmenistan

Supreme Council on Science and Technology under the President of Turkmenistan (SCST)

CERT-TM

- CERT is not separate department.
- (some) Functions of CERT are implemented by local administrators in each universities.
- Technical department of SCST takes care of stability of the network and carried out training of technical university staff.
- SCST technical department helps local administrators to find and manage problems

• CERT-AM

- CERT-AM (run by ISOC-AM) has wide range of services:
  - Alerts and Warnings
  - Incident Handling
  - Security Audits or Assessments
  - Intrusion Detection Services
  - Security-Related Information Dissemination
  - Disaster Recovery Planning
  - Security Consulting
  - Awareness Building
  - Education/Training

- Memorandum of Understanding was worked out. The memorandum was signed by ISPs and other IT companies, which agreed to cooperate with CERT AM.

CERT in Azerbaijan

- **Host organization**: AzNET Project (School Network)
- **Constituency**: schools and universities (incl. AzRENA) - total 80 clients
- **Services**: incidence handling, incidence response support, incidence response on site, configuration and maintenance of Security, trainings
- **Area**: Baku, Gandja, Mingachevir, Goranboy, Hajigabul
- MinICT has established Internet agency against hackers and requested AzNETs expertise in establishing tracking system for handling incidents
- National level CERT is planned to be started by MinICT

Conclusions

- *Starting new CERT needs ca. 2 year „incubation period”*
- *Training materials should be in local language*
- *International cooperation of CERTs is the important factor for their effectivness*
- *Still many countries without CERT... Task for ITU?*

THANK YOU !

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