24 Annex - Justice, freedom and security

187. TABLE REVIEW OF IT EQUIPMENT AND ONLINE CONNECTION AT THE BORDER CROSSING POINTS, POSSESSED BY THE POLICE

Table review of IT equipment and online connection at the border crossing points, possessed by the Police

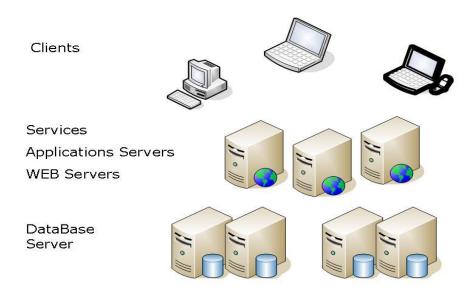
Classification of the border crossing point	Type of traffic	No	Border crossing point	Integrated in the police single information system	Link to INTERPOL	Number of CCROSS MATCH A 100 machine readers	Number of PCs	Manner of achieved communication with the the Police units
PASSENGER AND GOODS INTERNATIONAL TRAFIC	AIR TRAFFIC	1.	Airport Podgorica	yes	yes	10	10	optic
		2.	Airport Tivat	yes	yes	8	10	optic
	MARITIME TRAFFIC	3.	Port of Bar	yes	yes	5	5	optic
		4.	Port of Zelenika	no	no		2	
		5.	Port of Kotor	yes	yes	2	2	optic
		6.	Port of Budva	no	no		2	
		7.	Port of Risan	no	no		2	
	RAILWAY TRAFFIC	8.	Railway station Bijelo Polje	no	no		2	
		9.	Railway station Tuzi	no	no		2	
	LAND TRAFFIC	10.	Bozaj	yes	yes		4	Radio link-EAR
		11.	Kula	yes	yes		3	Radio link-EAR
		12.	Dracenovac	yes	yes	2	3	optic
		13.	Dobrakovo	yes	yes	4	6	optic
PASSENGER AND GOODS INTER.NATIO NAL TRAFIC	Land traffic	14.	Rance	yes	yes		2	optic
		15.	Metaljka	no	no		2	

16.	Scepan Polje	no	no		4	
17.	Vracenovici	no	no		2	
18.	Ilino Brdo	yes	yes		4	Radio link-EAR
19.	Debeli Brijeg	yes	yes	6	10	optic
20.	Sukobin	yes	yes		7	RDC
21.	Grncar	no	no		2	
22.	Vuca	no	no		2	
23.	Cemerno	no	no		2	
24.	Sula	no	No		2	
25.	Sitnica	yes	yes	2	2	opic
26.	Kobila	yes	yes		2	Radio link-EAR
27.	Nudo	no	no		2	
28.	Krstac	ne	ne		2	

Since 2003, integrated information system is in use within the Customs Administration, which involved procurement of new IT equipment (PCs, servers and network equipment) being implemented in newly installed centralised information system. The new information system concept is the following:

MONTENEGRO CUSTOMS CONCEPT SERVERS and PC working station





At the moment, Customs Administration has 400 PCs, distributed at 34 customs posts in the whole of Montenegro. All PCs are "brand name" of licensed Windows XP Professional and Microsoft Office 2003 package operational system. The PCs are procured on public tenders. The PCs brands are DELL, FUJITSU SIEMENS, HP.

Server related equipment being used is DELL. Server environment has 20 physical servers of the following types: Power Edge (2850, 2950, 6650, 1650, 750, R200) and DELL system storage DELL/EMC CX200 i DELL/EMC CX3, i BACKUP system DELL/PowerVault 122T. OS are Linux RHES, Windows SERVER, Fedora.

System platform:

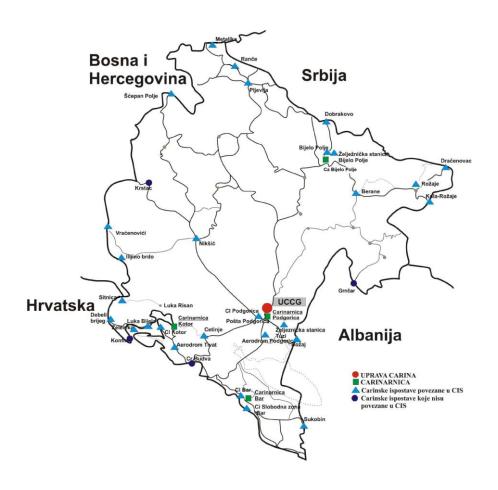
- 1. Linux Red Hat ES 4.0;
- 2. Linux Red Hat ES5.0;
- 3. Linux Red Hat AS 4.0:
- 4. Linux Red Hat AS 5.0:
- 5. Windows 2000 Server;
- 6. Windows 2003 Server;
- 7. Application server Oracle 10g, and
- 8. Relational database Oracle 10g.

For connection of customs post to integrated information system, Montenegrin Telecom transmission system is used (wherever possible, i.e. wherever Telecom had developed its infrastructure). At the posts where Telecom could not offer its services, the Customs Administration covered those posts with the mobile providers signals, and those posts are connected to the customs information system (CIS) by the means of local providers which enabled connection.

Main characteristics of the network are the following:

- 1. TCP/IP networking;
- 2. Scale: Local Area Network (LAN), Wide Area Network (WAN), Metropolitan Area Network (MAN), Virtual Private Network (VPN);
- 3. Connection method: Optical fibre, Ethernet, Wireless LAN;
- 4. Network topology: Star network, and
- 5. MAN Network Interface Cards: E1 link. The line data rate is 2.048 Mbit/s.

Customs Administration – connection to CIS June 2009.



CONNECTED

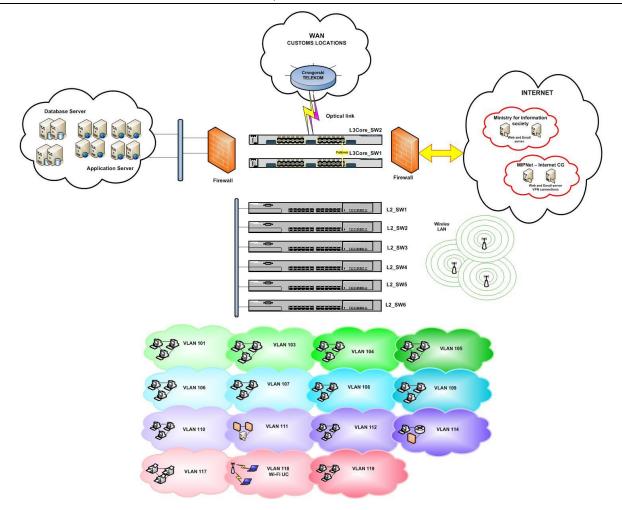
- 1 Podgorica, CA
- 2 Customs Office (CO) Podgorica Zetatrans
- 3 Railway CO Podgorica
- 4 Customs Post Office Podgorica

5 CO Airport - Podgorica 6 CO Cetinje 7 CO Bozaj 8 CO Bar 9 CO Free Zone Bar 10 CO Bar GAT 5 CO Kotor - Racica 11 12 CO Kotor - Port of Kotor 13 **Customs house Kotor** 14 **CO** Airport of Tivat 15 **CO** Airport of Tivat - Terminal CO Port of Bijela 16 17 CO Zelenika CO Debeli brijeg 18 19 **CO Niksic** 20 CO Ilino brdo 21 CO Berane 22 CO Kula - Rozaje 23 CO Dracenovac 24 CO Bijelo Polje - Railway station 25 CO Bijelo Polje - Terminal 26 CO Dobrakovo 27 CO Airport PG - Terminal 28 **CO Sukobin**

NOT CONNECTED

- 1 CO Budva
- 2 CO Konfin
- 3 CO Krstac
- 4 CO Grncar
- 5 CO Virpazar

Posts not being connected to the customs information system are planned to be connected within the future phase, or are the posts of the type not requiring IT support.



MONTENEGRO CUSTOMS

Wide Area Network (WAN), Metropolitan Area Network (MAN)

Backbone is developed with devices that are linked towards TC centre using G.703 interface having the bridge interface towards user. Backbone is developed in configuration with multipoint placed in Podgorica. One device is placed in each TC centre and respective one at star point in Podgorica.

The network is developed on 2 Mbps bridges (SDSL) from TC centre to users.

WAN Central Router: Five Allied Telesyn AR745 MAN Router: Allied Telesyn AR740 and AR410

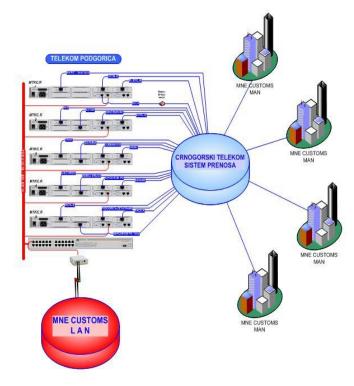
MAN Network Interface Cards: E1 link. The line data rate is 2.048 Mbit/s

MAN modems: Allied Telesyn xDSL, Zyxel SDSL



MONTENEGRO CUSTOMS WAN CENTRAL ROUTER – TELEKOM MNE





MONTENEGRO CUSTOMS SERVERS LAN

Application Server: For CIS- DELL PowerEdge 2850 – Red Hat Linux

Application Server: For CIS test – DELL PowerEdge 6650 – Red Hat Linux Application Server: For Tranzit – DELL Power Edge 2850 – Red Hat Linux Application Server: For Tranzit test - DELL PowerEdge 6650 – Red Hat Linux Application Server: For REPORT – DELL PowerEdge 1650SC – Red Hat Linux Application Server: For MQ – DELL PowerEdge 750 – Windows 2003 Server Application Server: For RMS – DELL PowerEdge 2850 – Windows 2003 Server

Application Server: For GARANCIJE – DELL PowerEdge 6650 – RedHat Linux

Application Server: VMWare Server – DELL PowerEdge 2850 - OGLASNA – Windows XP

Network Server: VMWare Server – DELL PowerEdge 2850 – DNS, DHCP. WINS – Windows 2003

Servers

Application Server: VMWare Server - DELL PowerEdge 2850 – Symantec AV Corporate Application Server: VMWare Server - DELL PowerEdge 2850 – CISCO ACS (RADIUS)

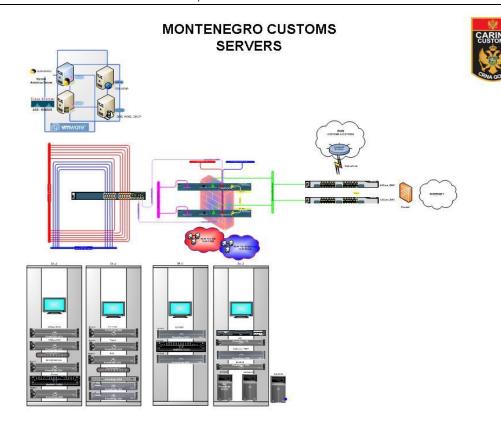
Database Server: DELL PowerEdge 2850 Cluster

Database Storage: DELL EMC/CX300

Database Server: DELL PowerEdge 6650 Cluster - Test

Database Storage: DELL EMC/CX200 - Test

BACKUP Server: Dell Powervault PV 122T LTO Autoloader



MONTENEGRO CUSTOMS

Public zone - VPN

Exchange of data:

ERP (SAD) for Brokers and partners

ZZI (Maintenance SW platform)

MONTSTAT

TAX ADMINISTRATION

POLICE DIRECTORATE

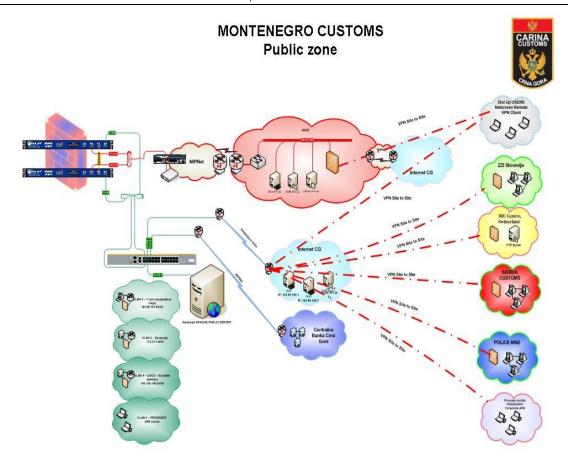
IRU (TIR carnet) Geneva

Ministry of Finance

Central Bank

WCO

Serbian Customs Administration



INERCONNECTING Central Bank of Montenegro to Montenegro Customs

Connecting MCA network to MNE Central bank.

All payment statement from Customs partners (operators) are received in real time, after were issued by CB.

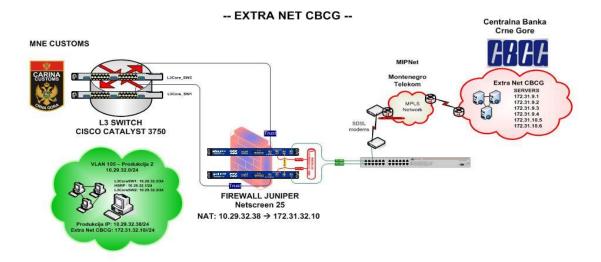
This transaction are compared against MCA FM database where are finance data from SAD. SAD should be closed.

Online service from 8.30 to 18.00.



INERCONNECTING Central Bank of Montenegro to Montenegro Customs





INERCONNECTING IRU Net GENEVE to Montenegro Customs

Connecting MCA with IRU Network in GENEVA (Switzerland)
MCA sending TIR carnet data from CIS in IRU database
Messages (data) are generating and sending automatically from CIS to IRU
Sending MSG are using FTP connection via IPSEc VPN-a each day



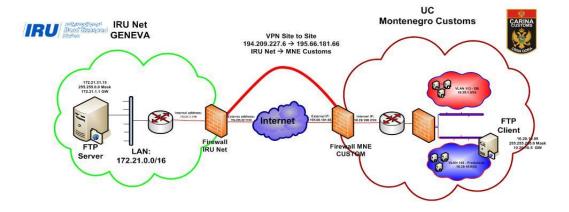
INERCONNECTING Read Third State IRU Net GENEVE to Montenegro Customs



Site-to-Site IPSec IRU Net GENEVA – MNE Customs

Phase 1: ISAKMP SA (Security Association) and preshared key Phase 2 IPSec SA

encryption type 3DES and hash MD5



Site To Site IPSec VPN ZZi Ljubljana – MNE CUSTOMS

SERVICE FOR MAINTENANCE AND OUTSOURCING REMOTE SERVICE on HW & SW installation and product in CIS IT 24x7x365

MONTENEGRO CUSTOMS

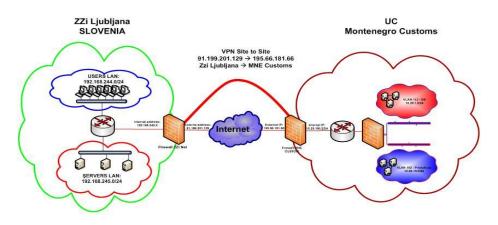


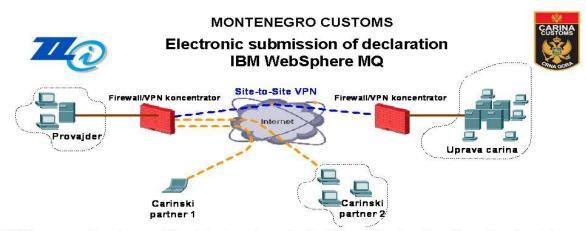
Site-to-Site IPSec VPN ZZi Ljubljana – MNE Customs



Phase 1: ISAKMP SA (Security Association) and preshared key Phase 2 IPSec SA

encryption type 3DES and hash MD5





- -VPN connection is used for Electronic submission of declaration from/to Provider
- -This servis is dedicated to Customs partner, Economic Operator, brokers, ..
- -2 way exchange of information (MCA are sending result of formal control of SAD WIT RIP ID Number)
- Service Is available 24/7

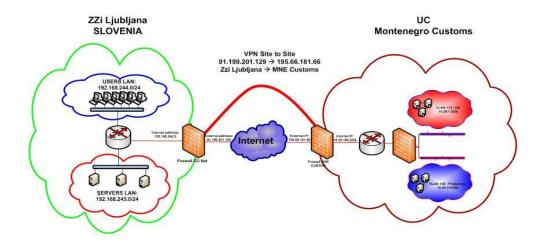




Phase 1: ISAKMP SA (Security Association) and preshared key

Phase 2 IPSec SA

encryption type 3DES and hash MD5

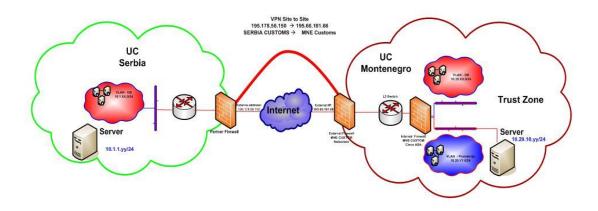


Site To Site IPSec VPN SER CUSTOMS - MNE CUSTOMS

SERVICE for announcement of all procedures ending at the border crossing points towards Serbia, as well as for exchange of information on empty trucks in transit at the respective border crossing points. SEED Project.

24x7x365

INERCONNECTING Serbia Customs to Montenegro Customs



MONTENEGRO CUSTOMS BACKUP SERVERS

The Dell PowerVault 122T offers an automated tape backup solution for the cost of a stand-alone tape drive. Archive up to 1.6 terabytes with 8 LTO-1 tapes at up to 108 gigabytes per hour. The 2U high compact desktop chassis can be 19" rack mounted using Dell rapid rails or simply set on a rack mounted shelf



Border offices and border crossing posts - training of the customs staff