EAGLE® LNP Application Processor (ELAP)

Release 8.0

Feature Notice

910-5455-001 Revision A August 2008



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Patents

This product is covered by one or more of the following U.S. and foreign patents:

U.S. Patent Numbers:

5,732,213; 5,953,404; 6,115,746; 6,167,129; 6,324,183; 6,327,350; 6,456,845; 6,606,379; 6,639,981; 6,647,113; 6,662,017; 6,735,441; 6,745,041; 6,765,990; 6,795,546; 6,819,932; 6,836,477; 6,839,423; 6,885,872; 6,901,262; 6,914,973; 6,940,866; 6,944,184; 6,954,526; 6,954,794; 6,959,076; 6,965,592; 6,967,956; 6,968,048; 6,970,542; 6,987,781; 6,987,849; 6,990,089; 6,990,347; 6,993,038; 7,002,988; 7,020,707; 7,031,340; 7,035,239; 7,035,387; 7,043,000; 7,043,001; 7,043,002; 7,046,667; 7,050,456; 7,050,562; 7,054,422; 7,068,773; 7,072,678; 7,075,331; 7,079,524; 7,088,728; 7,092,505; 7,108,468; 7,110,780; 7,113,581; 7,113,781; 7,117,411; 7,123,710; 7,127,057; 7,133,420; 7,136,477; 7,139,388; 7,145,875; 7,146,181; 7,155,206; 7,155,243; 7,155,505; 7,155,512; 7,181,194; 7,190,702; 7,190,772; 7,190,959; 7,197,036; 7,206,394; 7,215,748; 7,219,264; 7,222,192; 7,227,927; 7,231,024; 7,242,695; 7,254,391; 7,260,086; 7,260,207; 7,283,969; 7,286,516; 7,286,647; 7,286,839; 7,295,579; 7,299,050; 7,301,910; 7,304,957; 7,318,091; 7,319,857; 7,327,670

Foreign Patent Numbers:

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EP1062792; EP1308054; EP1247378; EP1303994; EP1252788; EP1161819; EP1177660; EP1169829; EP1135905; EP1364520; EP1192758; EP1240772; EP1173969; CA2352246
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Ordering Information

Your Tekelec Sales Representative can provide you with information about how to order additional discs.

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Feature Notice Introduction

Feature Notices are distributed to customers with each new release of software.

This *Feature Notice* includes a brief overview, lists new hardware required (if any), provides the hardware baseline for this release (if applicable), and explains how to find the *Release Notice* and other customer documentation on the Customer Support Site.

Important Operational Changes

None

New Feature for ELAP 8.0

ELAP has been updated with the 384 Million LNP Records feature, a quantity feature that increases the LNP capacity from 228 million LNP numbers and number pool blocks to 384 million LNP numbers and number pool blocks per EAGLE 5 ISS node.

384 Million LNP Records

The 384 Million LNP Records feature is a quantity feature that increases the LNP capacity from 228 million LNP numbers and number pool blocks to 384 million LNP numbers and number pool blocks per EAGLE 5 ISS node.

This feature also provides up to 200 thousand location routing numbers (LRNs) and 350 thousand numbering plan area and exchange (NPA-NXX) numbers on a single node.

The 384 Million LNP Records feature is an EAGLE 5 ISS feature. However, the feature interacts with the ELAP and LSMS systems. All of the systems must be at the required release before the 384 Million LNP Records feature can be enabled.

For information on the ELAP component of the 384 Million Records feature, refer to the *ELAP Administration Manual* of your EAGLE 5 ISS Release 39.0 documentation set. For information on the LNP component, refer to the *LNP Feature Activation Guide*.

Feature Control Requirements

The 384 Million LNP Records feature has the following feature control requirements:

- The LSMS, EAGLE 5 ISS, and ELAP systems must be running at the required release levels.
- The 384 Million Records feature for the LSMS must be turned on before the 384 Million LNP Records feature for the EAGLE 5 ISS can be enabled.
- The 384 Million LNP Records feature is a quantity feature. The numbers of LNP records are increased beyond 228 million in increments of 12 million. A FAK for the part number corresponding to the desired increment is required:
 - 893-0110-24: 240 million

- 893-0110-25: 252 million
- 893-0110-26: 264 million
- 893-0110-27: 276 million
- 893-0110-28: 288 million
- 893-0110-29: 300 million
- 893-0110-30: 312 million
- 893-0110-31: 324 million
- 893-0110-32: 336 million
- 893-0110-33: 348 million
- 893-0110-34: 360 million
- 893-0110-35: 372 million
- 893-0110-36: 384 million
- A temporary FAK cannot be used to enable the feature.
- The feature cannot be turned off after being turned on.
- After the feature is turned on, a feature that provides a lower number of records cannot be enabled and turned on.

Hardware Requirements

The hardware requirements for the 384 Million LNP Records feature varies depending on the quantity that is enabled and the version of ELAP that is used.

Table 1-1. Hardware Compatibility Matrix

Quantity FAK Enabled	ELAP 7.0 or Less	ELAP 8.0
<= 192M	Service Module cards	E5-SM4G cards
204M - 228M	DSM cards	E5-SM4G cards
>= 240M	N/A	E5-SM4G cards

NOTE: Quantities of >228M require ELAP 8.0 and LSMS 11.0.

NOTE: Total system TPS capacity cannot exceed 40,000 TPS when E5-SM4G cards are used.

Commands

The following commands are enhanced to support the 384 Million LNP Records feature. For complete descriptions of these commands, refer to the *Commands Manual* of your EAGLE 5 ISS Release 39.0 documentation set.

• **chg/rtrv-ip-card**—Enhanced to support the 384 Million LNP Records feature.

The following example displays output for the **rtrv-ip-card** command when an E5-SM4G card is used.

rtrv-ip-card

```
rlghncxa03w 08-05-04 22:12:42 EST EAGLE5 39.0.0

LOC 1105

SRCHORDR LOCAL

DNSA ------
```

```
DNSB
         -----
 DEFROUTER -----
 DOMAIN -----
 SCTPCSUM crc32c
 BPIPADDR 192.168.124.2
 BPSUBMASK 255.255.25.0
LOC 1107
 SRCHORDR LOCAL
      -----
 DNSA
 DNSB
 DEFROUTER -----
 DOMAIN -----
 SCTPCSUM crc32c
 BPIPADDR 192.168.124.4
 BPSUBMASK 255.255.255.0
LOC 1111
 SRCHORDR LOCAL
 DNSA -----
 DNSB
 DEFROUTER -----
 DOMAIN -----
 SCTPCSUM crc32c
 BPIPADDR 192.168.124.3
 BPSUBMASK 255.255.25.0
```

- **chg-stpopts**—Enhanced to support the 384 Million LNP Records feature.
- enable/chg/rtrv-ctrl-feat—Enhanced to enable and turn on the desired quantity of the 384 Million LNP Records feature. The rtrv-ctrl-feat command is enhanced to display the status of the 384 Million LNP Records feature after it has been enabled.

The following example displays output for the rtrv-ctrl-feat command when the 384 million quantity is enabled.

rtrv-ctrl-feat

rlghncxa03w 08-05-09 16:40:40 EST EAGLE 39.0.0

The following features have	_	-	
Feature Name	Partnum	Status	~
HC-MIM SLK Capacity	893012707	on	64
Command Class Management		on	
LNP Short Message Service		on	
Prepaid SMS Intercept Ph1		on	
Intermed GTT Load Sharing		on	
MNP Circ Route Prevent	893007001	on	
XGTT Table Expansion	893006101	on	400000
XMAP Table Expansion	893007710	on	3000
Large System # Links	893005910	on	2000
Routesets	893006403	on	8000
EAGLE5 Product	893007101	on	
EAGLE Product	893007201	off	
IP7 Product	893007301	off	
Network Security Enhance	893009101	off	
Telnet	893005701	on	
Port Chk for MO SMS	893009301	on	
SCCP Loop Detection	893016501	off	
LNP ELAP Configuration	893010901	on	
LNP ported TNs	893011036	on	384000000
LNP ported LRNs	893010501	on	200000
LNP ported NPANXXs	893009402	on	350000
15 Minute Measurements	893012101	off	
EIR	893012301	on	
EAGLE OA&M IP Security	893400001	off	
SCCP Conversion	893012001	on	
SE-HSL SLK Capacity	893013005	on	64
GPORT	893017201	on	
APORT	893016601	on	
IS41 GSM Migration	893017301	off	
MTP Msgs for SCC Apps	893017401	off	

```
INP 893017901 on ----
G-Flex MAP Layer Routing 893021701 on ----
G-Flex 893021901 on ----
```

Limitations

No limitations are associated with this feature.

Related Publications

For information about additional publications that are related to this document, refer to the *Related Publications* document. The *Related Publications* document is published as a part of the *Release Documentation* and is also published as a separate document on the Tekelec Customer Support Site.

Locate Product Documentation on the Customer Support Site

To view or download product documentation, log into the Tekelec Customer Support site at:

https://support.tekelec.com/index.asp

- 1. Log in with your user name and password. (Click on **Need an Account?** if you need to register).
- 2. Select **EAGLE** from the Product Support menu.
- 3. Select the release number from the Release menu.
- **4.** Locate the Notices section to view the latest Feature Notice.
- 5. Locate the Manuals section to view all manuals applicable to this release.
 - The documentation is listed in alphabetical order by the manual name. Only the first three manuals display. Click **more...** to see the remaining manuals.
- **6.** Locate the latest revision of the manual name.
 - Confirm the release number and last available revision.
 - Select the 936-xxxx-x01 part number to download the complete documentation set with all linked files.

NOTE: The electronic file for this part number is quite large.

- 7. To view a manual, double-click the manual name.
- **8.** To download a manual, right-click and select **Save Target As**.

NOTE: Customers may print a reasonable number of each manual for their own use.

Customer Training

Tekelec offers a variety of technical training courses designed to provide the knowledge and experience required to properly provision, administer, operate, and maintain the EAGLE 5 ISS. To enroll in any of the courses or for schedule information, contact the Tekelec Training Center at (919) 460-3064 or E-mail eagletrain@tekelec.com.

A complete list and schedule of open enrollment can be found at www.tekelec.com.

Customer Care Center

The Tekelec Customer Care Center offers a point of contact for product and service support through highly trained engineers or service personnel. The Tekelec Customer Care Center is available 24 hours a day, 7 days a week at the following locations:

Tekelec, USA

Phone:

+1 888 367 8552 (US and Canada only)

+1 919 460 2150 (international)

Email: support@tekelec.com

Tekelec, Europe

Phone: +44 1784 467804 Email:ecsc@tekelec.com

When a call is received, a Customer Service Report (CSR) is issued to record the request for service. Each CSR includes an individual tracking number.

After a CSR is issued, the Customer Care Center determines the classification of the trouble. If a critical problem exists, emergency procedures are initiated. If the problem is not critical, information regarding the serial number of the system, COMMON Language Location Identifier (CLLI), initial problem symptoms (includes outputs and messages) is recorded. A primary Customer Care Center engineer is also assigned to work on the CSR and provide a solution to the problem. The CSR is closed when the problem is resolved.

Emergency Response

In the event of a critical service situation, emergency response is offered by the Tekelec Customer Care Center 24 hours a day, 7 days a week. The emergency response provides immediate coverage, automatic escalation, and other features to ensure that the critical situation is resolved as rapidly as possible.

A critical situation is defined as a problem with an EAGLE 5 ISS that severely affects service, traffic, or maintenance capabilities, and requires immediate corrective action. Critical problems affect service and/or system operation resulting in:

- A total system failure that results in loss of all transaction processing capability
- Significant reduction in system capacity or traffic handling capability
- Loss of the system's ability to perform automatic system reconfiguration
- Inability to restart a processor or the system
- Corruption of system databases that requires service affecting corrective actions
- Loss of access for maintenance or recovery operations
- Loss of the system ability to provide any required critical or major trouble notification

Any other problem severely affecting service, capacity/traffic, billing, and maintenance capabilities may be defined as critical by prior discussion and agreement with the Tekelec Customer Care Center.

Glossary

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CLLI Common Language Location Identifier

CSR Customer Service Request

I

ISS Integrated Signaling System