# SMDG Terminal Code List (TCL)

SMDG #75 Virtual Plenary, 25th January 2021

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# Agenda

- Introduction

- Using Terminal Codes

- New TCL features

- Current status and open tasks

# Introduction

# Introduction

- Why SMDG Terminal Codes?
  - Appropriate international standard code list is missing or not sufficient
  - The SMDG is officially recognised by UN/CEFACT as Child Code List Agency
  - SMDG Terminal Codes are child codes (extensions) of UN/LOCODE
  - Already used by various players from the maritime industry (carriers, terminals, TradeLens, DCSA, etc.)
  - Suitable for various electronic formats and technologies (EDIFACT, ANSI X.12, XML, Web API, etc.)
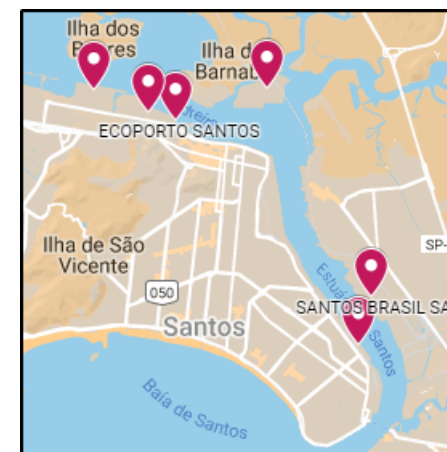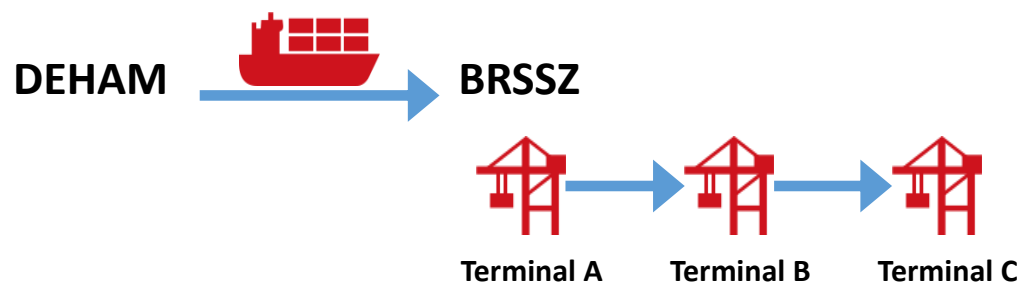
# Introduction

- Scope of the SMDG Terminal Code List (TCL)
  - Contains codes for *container handling* terminal facilities that are called by seagoing cargo vessels in maritime transport.
  - Does not contain inland terminals and depots (these are handled by BIC).
  - Contains codes for the facilities of a terminal, not for individual berths at the pier.

# Introduction

- Areas of application
  - Indicate the load/discharge location of a container if a vessel calls at multiple terminals within a port (e.g. in BAPLIE, MOVINS, COPRAR, COPARN)
  - Identification of terminal in reports (e.g. in TPFREP, CODECO, COARRI, IFTSAI)
  - Vessel tracking
  - Container tracking
  - …and many more.

# Using Terminal Codes

SMDG #75 Virtual Plenary – Mark Lim (Integration EDI/EAI Interfaces, Hamburg Süd)

# Use case

- Voyage from Hamburg (DEHAM) to Santos (BRSSZ), vessel calls multiple terminals in BRSSZ



DEHAM → BRSSZ

Terminal A → Terminal B → Terminal C

- Problem: The port UN/LOCODE on its own is insufficient to identify the discharge terminal
- Solution: Use SMDG Terminal Codes in addition to the port UN/LOCODE

**SMDG Terminal Code List (TCL)**
v20210101
www.smdg.org  Click here to view the SMDG Terminal Facilities on the world map

| UNLOCODE | Alternative UNLOCODEs | Terminal Code | Terminal Facility Name | Terminal Company Name | Latitude (DMS) | Longitude (DMS) |
|---|---|---|---|---|---|---|
| BRSSZ | | BTP | BRASIL TERMINAL PORTUARIO S.A. SANTOS | BRASIL TERMINAL PORTUARIO S.A. SANTOS | S 23°55'19" | W 046°21'10" |
| BRSSZ | | ECOS | ECOPORTO SANTOS | ECOPORTO SANTOS | S 23°55'40" | W 046°20'07" |
| BRSSZ | | EMBRA | EMBRAPORT | EMBRAPORT EMPRESA BRASILEIRA | S 23°55'18" | W 046°18'56" |
| BRSSZ | | LIBSS | LIBRA TERMINAIS SA | LIBRA TERMINAIS SA | S 23°58'18" | W 046°17'46" |
| BRSSZ | | RODRI | RODRIMAR SA TRANSP EQUIP INDUSTRIAL | RODRIMAR SA TRANSP EQUIP INDUSTRIAL | S 23°55'35" | W 046°20'28" |
| BRSSZ | | SSA | SANTOS BRASIL SA | SANTOS BRASIL SA | S 23°57'45" | W 046°17'36" |

# Terminal Codes in EDIFACT messages

- UN/LOCODEs and SMDG Terminal Codes are typically used in LOC segments

- Example: Discharge at Terminal "Santos Brasil SA" (SSA) in Santos (BRSSZ)

```
LOC+11+BRSSZ+SSA:TER:306'          (D.95B)
LOC+11+BRSSZ+SSA:TERMINALS:306'    (D.00B and later)
```

- Element C517.3225 contains the port UN/LOCODE.
- Element C519.3223 contains the Terminal Code.
- Code 306 in element C519.3055 stands for SMDG.
- The usage of SMDG-related codes in elements 1131 and 3055 is explained in SMDG Recommendation #07.

```
       LOC  PLACE/LOCATION IDENTIFICATION

       Function: To identify a place or a location and/or related
                 locations.

010       3227  LOCATION FUNCTION CODE QUALIFIER        M    1 an..3

020       C517  LOCATION IDENTIFICATION                 C    1
          3225  Location name code                      C      an..25
          1131  Code list identification code           C      an..17
          3055  Code list responsible agency code       C      an..3
          3224  Location name                           C      an..256

030       C519  RELATED LOCATION ONE IDENTIFICATION     C    1
          3223  First related location name code        C      an..25
          1131  Code list identification code           C      an..17
          3055  Code list responsible agency code       C      an..3
          3222  First related location name             C      an..70

040       C553  RELATED LOCATION TWO IDENTIFICATION     C    1
          3233  Second related location name code       C      an..25
          1131  Code list identification code           C      an..17
          3055  Code list responsible agency code       C      an..3
          3232  Second related location name            C      an..70

050       5479  RELATION CODE                           C    1 an..3
```

# Terminal Codes and UN/LOCODEs

- A terminal code on its own is not unique. It is only unique in conjunction with its port UN/LOCODE.

- Example APM Terminals: 11 terminals with the code "APMT"

| UNLOCODE | Alternative UNLOCODEs | Terminal Code | Terminal Facility Name | Terminal Company Name | Latitude (DMS) | Longitude (DMS) |
|---|---|---|---|---|---|---|
| CRMOB | | APMT | APM TERMINALS MOIN | APM TERMINALS MOIN | N 10°00'33" | W 083°00'15" |
| DKAAR | | APMT | APM TERMINALS AARHUS | APM TERMINALS | N 56°09'15" | E 010°14'29" |
| GEPTI | | APMT | APM TERMINALS POTI | APM TERMINALS POTI SEA PORT | N 42°09'08" | E 041°39'12" |
| INPPV | INPAV | APMT | APM TERMINALS PIPAVAV | APM TERMINALS (GUJARAT PIPAVAV PORT LTD.) | N 20°55'13" | E 071°30'39" |
| MAPTM | | APMT | APM TERMINALS TANGIER | APM TERMINALS TANGIER | N 35°53'24" | W 005°29'48" |
| MXLZC | | APMT | APM TERMINALS LAZARO CARDENAS TERMINAL DE CONTENEDORES II | APM TERMINALS LAZARO CARDENAS S.A. DE C.V. | N 17°58'28" | W 102°10'21" |
| NGPHC | NGONN | APMT | WEST AFRICA CONTAINER TERMINAL (ONNE PORT COMPLEX) | APM TERMINALS | N 04°42'15" | E 007°09'20" |
| OMSLL | | APMT | APM TERMINALS SALALAH | APM TERMINALS | N 16°56'29" | E 053°59'43" |
| USLAX | | APMT | APM TERMINALS LOS ANGELES PIER 400 | APM TERMINALS | N 33°43'53" | W 118°14'55" |
| USMOB | | APMT | APM TERMINALS MOBILE | APM TERMINALS MOBILE | N 30°40'05" | W 088°02'02" |
| USNYC | USEWR | APMT | APM TERMINALS ELIZABETH | APM TERMINALS ELIZABETH | N 40°39'36" | W 074°08'56" |

- Thus, a SMDG Terminal Code is only meaningful in conjunction with its corresponding port UN/LOCODE.

# UN/LOCODEs in the TCL

- TCL codes are child codes of UN/LOCODE

- Therefore, the TCL only contains official UN/LOCODEs

- The TCL is aligned with [UN/ECE Recommendation 16](#)

  *"Facilities which deliver services in a location identified with a UN/LOCODE can be identified by a code different from the UN/LOCODE, which is considered as a child code of the UN/LOCODE.*

  *These child codes can be built either by adding characters to the UN/LOCODE of a location or created as an autonomous, structured code which provides a link to the UN/LOCODE itself"*

  *(Revision 4, 2020 Edition)*

- Only UN/LOCODEs that are ports are eligible for the TCL

- These are UN/LOCODEs with the function 1 (=port)

# UN/LOCODEs in the TCL

- Example: Shanghai

United Nations
Code for Trade and Transport Locations (UN/LOCODE)

**(CN) CHINA**

| Ch | LOCODE | Name | NameWoDiacritics | SubDiv | Function | Status | Date |
|---|---|---|---|---|---|---|---|
|  | CN SGH | Shanghai | Shanghai | SH | 12345--- | AS | 1401 |
|  | CN SHA | Shanghai Hongqiao International Apt | Shanghai Hongqiao International Apt | SH | ---4---- | AS | 1601 |
|  | CN SHG | Shanghai Pt | Shanghai Pt | SH | 1------- | AS | 1601 |
|  | CN PVG | Shanghai Pudong International Apt | Shanghai Pudong International Apt | SH | ---4---- | AS | 1401 |
|  | CN SHZ | Shanghai Railway Station | Shanghai Railway Station | SH | -23----- | AS | 1601 |

**1.6 Column "Function"**

This column contains a 8-digit function classifier code for the location, where:

| 0 | A value "0" in the first position specifies that the functional use of a location is not known and is to be specified. |
|---|---|
| 1 | Specifies that the location is a Port, as defined in UN/ECE Recommendation 16. |
| 2 | Specifies that the location is a Rail terminal. |
| 3 | Specifies that the location is a Road terminal. |
| 4 | Specifies that the location is an Airport. |
| 5 | Specifies that the location is a Postal exchange office. |
| 6 | Value reserved for multimodal functions, ICDs etc. |
| 7 | Value reserved for fixed transport functions (e.g. oil platform). |
| B | Specifies that the location is Border crossing. |

- Two UN/LOCODEs are eligible for the TCL: CNSGH and CNSHG. Which code to use?

# UN/LOCODEs in the TCL

- Both may be used: as main/primary and alternative/secondary UN/LOCODE

- Reasons to allow for an alternative UN/LOCODE in the TCL
    1. A UN/LOCODE exists for the city and another for the port. Example Shanghai: CNSGH for the city and alternative code CNSHG for the port.
    2. A UN/LOCODE exists for the city and another for the terminal. Example Istanbul: TRIST for the city and alternative codes TRKMX, TRMAD, TRMPT for the terminals.
    3. A terminal is located in a small town, located close to a metropolis. Example USNYC for the metropolis and alternative codes USEWR and USUYU for the small towns.

| UNLOCODE | Alternative UNLOCODEs | Terminal Code | Terminal Facility Name | Terminal Company Name | Latitude (DMS) | Longitude (DMS) |
|---|---|---|---|---|---|---|
| USNYC | USEWR | APMT | APM TERMINALS ELIZABETH | APM TERMINALS ELIZABETH | N 40°39'36" | W 074°08'56" |
| USNYC | | GTC | GCT BAYONNE | GLOBAL CONTAINER TERMINALS | N 40°40'21" | W 074°04'57" |
| USNYC | USUYU | NYCT | GCT NEW YORK | GLOBAL CONTAINER TERMINALS | N 40°38'27" | W 074°11'21" |
| USNYC | | MAHER | MAHER CONTAINER TERMINAL | MAHER TERMINALS, LLC | N 40°40'59" | W 074°09'14" |
| USNYC | USEWR | PNCT | PORT NEWARK CONTAINER TERMINAL | PORTS AMERICA | N 40°41'03" | W 074°09'02" |

- SMDG and UN/CEFACT recommend to use the primary UN/LOCODE

# UN/LOCODEs in the TCL

- As per the new Recommendation 16 (Revision 4, 2020 Edition), separate UN/LOCODEs are no longer assigned to port or terminal facilities

  *"A location with several functions should only have one UN/LOCODE code assigned. Any subset of a location such as airports, rail stations or container terminals should be identified with the appropriate function; a separate UN/LOCODE should not be assigned" (Revision 4, 2020 Edition)*

# New TCL features

# The TCL on the world map

- Standard Google Maps interface, click here to view the map

# The TCL on the world map

- Terminal details are shown in the left pane when a terminal is selected

# API to query the TCL

- BIC implemented a common API to provide BIC Container Facility and SMDG Terminal Facility details
- The API is maintained by BIC; for more information, please refer to https://www.bic-code.org/api-information-page/

# Current status and open tasks

# Current status

- Ongoing data quality control
  - Verify existing entries (terminal name/company, GPS coordinates, website, address)
  - Remove obsolete and duplicate entries
  - Difficult to verify some entries: no website/address/contacts, ambiguous names, etc.
  - All code requests are required to contain GPS coordinates of a reference point on the terminal close to the pier (degrees-minutes-**seconds**!)
  - All code requests are required to contain a terminal contact to verify the proposed code and all other details (if the applicant is not the terminal itself).
- Significant data quality improvement since SMDG #74 (Singapore) in 2019.

| Date | Total entries | With coordinates | With website | With address |
|---|---|---|---|---|
| Sep 2019 | 891 | 351 (39.4%) | 131 (14.7%) | 45 (5.1%) |
| Jan 2021 | 846 | 846 (100.0%) | 704 (83.2%) | 398 (47.0%) |

# Information content in the TCL

- Same information is provided in the Excel, API and world map (exception: expired facilities appear only in the Excel version)

- The TCL is updated several times per year

**SMDG Terminal Code List (TCL)**

v20210101

www.smdg.org  ·  Click here to view the SMDG Terminal Facilities on the world map

| | UNLOCODE | Alternative UNLOCODE | Terminal Code | Terminal Facility Name | Terminal Company Name | Latitude (DMS) | Longitude (DMS) | Last change | Valid from | Valid until |
|---|---|---|---|---|---|---|---|---|---|---|
| 408 | IQUQR | | BGT | BASRA GATEWAY TERMINAL | INTERNATIONAL CONTAINER TERMINAL SERVICES, INC. (ICTSI) | N 30°03'54" | E 047°55'42" | | 2018-05-25 | 2020-09-30 |
| 409 | IQUQR | | BGTE | BASRA GATEWAY TERMINAL EAST | INTERNATIONAL CONTAINER TERMINAL SERVICES, INC. (ICTSI) | N 30°03'46" | E 047°56'00" | | 2020-09-01 | |
| 410 | IQUQR | | BGTW | BASRA GATEWAY TERMINAL WEST | INTERNATIONAL CONTAINER TERMINAL SERVICES, INC. (ICTSI) | N 30°03'35" | E 047°55'38" | | 2020-09-01 | |
| 411 | ISREY | | SUNDA | KLEPPSBAKKI | FAXAPORTS | N 64°09'01" | W 021°51'15" | | 2018-09-24 | |
| 412 | ITAOI | | ACT | ADRIATIC CONTAINER TERMINAL | ADRIATIC CONTAINER TERMINAL ANCONA | N 43°37'19" | E 013°29'53" | 2020-07-01 | 2016-04-07 | |
| 413 | ITAOI | | ASE | ADRIATIC SERVICES ENTERPRISE ANCONA | ADRIATIC SERVICES ENTERPRISE SRL | N 43°37'16" | E 013°29'45" | | 2015-06-12 | |

| | Terminal Website | Terminal Address | Remarks |
|---|---|---|---|
| 408 | http://www.ictsiiraq.com/default.aspx | | Split into two separate entries for the west (existing) and east (new) terminal. |
| 409 | http://www.ictsiiraq.com/default.aspx | North Port, Umm Qasr, Basra, Iraq | Berths 25,26,27. |
| 410 | http://www.ictsiiraq.com/default.aspx | North Port, Umm Qasr, Basra, Iraq | Berths 19,20,21. |
| 411 | https://faxaports.is/ | Tryggvagata 17, 101 Reykjavik, Iceland | |
| 412 | https://www.actml.it/it/act-home/ | Nuova Darsena, 60125 Ancona, Italy | Pier 23 (new dock) |
| 413 | https://www.aseterminal.com/ | | Pier 25 |

# Improving TCL data

## How to get involved?

- Everyone in the community is welcome to contribute (terminals, carriers, etc.)
- Apply for new terminal codes if missing in the TCL
    - The request form (Excel) is located at https://smdg.org/documents/smdg-code-list/
    - Fill in the request form and email it to coderequest@smdg.org
- Help to improve data quality by informing us about incorrect/outdated entries
- Use the TCL on the world map as visual aid to locate terminals

# Useful links

- Useful links
  - SMDG Terminal Code List
    https://smdg.org/documents/smdg-code-list/smdg-terminal-code-list/
  - Application form for a new SMDG Terminal Code
    https://smdg.org/documents/smdg-code-list/
  - SMDG Terminal Facilities on the world map
    https://www.google.com/maps/d/viewer?mid=1nbJI9NkpAayVpSJqy13qJ2xhatcIKQJK
  - Usage of Code Lists in EDIFACT Messages maintained by SMDG (Recommendation 7)
    https://smdg.org/documents/smdg-recommendations/
  - SMDG EDIFACT Mapping Implementation Guidelines (MIGs)
    https://smdg.org/documents/edifact-migs-message-implementation-guidelines/
  - API to query the SMDG TCL (provided by BIC)
    https://www.bic-code.org/api-information-page/
  - UN/ECE Recommendation 16 for UN/LOCODEs
    https://unece.org/trade/publications/recommendation-ndeg16-united-nations-code-trade-and-transport-locations

# Thank You!