

830 Infor Supplier Exchange – Generic Planning Schedule with Release Capability / Version 004010

Functional Group ID=**PS**

Introduction

This Draft Standard for Trial Use contains the format and establishes the data contents of the Planning Schedule with Release Capability Transaction Set (830) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business practice relative to the transfer of forecasting/material release information between organizations. The planning schedule transaction may be used in various ways or in a combination of ways, such as: (1) a simple forecast; (2) a forecast with the buyer's authorization for the seller to commit to resources, such as labor or material; (3) a forecast that is also used as an order release mechanism, containing such elements as resource authorizations, period-to-date cumulative quantities, and specific ship/delivery patterns for requirements that have been represented in "buckets," such as weekly, monthly, or quarterly. The order release forecast may also contain all data related to purchase orders, as required, because the order release capability eliminates the need for discrete generation of purchase orders.

Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Req. Name</u>	<u>Req. Des.</u>	<u>Loop Max.Use</u>	<u>Notes and Repeat</u>	<u>Comments</u>
M	010	ST	Transaction Set Header			M	1
M	020	BFR	Beginning Segment for Planning Schedule			M	1
LOOP ID - N1							
	230	N1	Name			O	1

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Req. Name</u>	<u>Req. Des.</u>	<u>Loop Max.Use</u>	<u>Notes and Repeat</u>	<u>Comments</u>
LOOP ID - LIN							
M	010	LIN	Item Identification			M	1
	020	UIT	Unit Detail			O	1
	140	REF	Reference Identification			O	12
	150	PER	Administrative Communications Contact			O	3
	230	ATH	Resource Authorization			O	20
LOOP ID - FST							
	410	FST	Forecast Schedule			O	1
							n1

		LOOP ID - SHP	25
470	SHP	Shipped/Received Information	O 1
480	REF	Reference Identification	O 5

Summary:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Req. Des.</u>	<u>Loop Max.Use</u>	<u>Notes and Repeat</u>	<u>Comments</u>
	010	CTT	Transaction Totals		O 1	n2
M	020	SE	Transaction Set Trailer		M 1	

Transaction Set Notes

1. At least one occurrence of segment FST is required, either in the FST loop or within the SDP loop. These two loops are mutually exclusive.
2. Number of line items (CTT01) is the accumulation of the number of LIN segments. If used, hash total (CTT02) is the sum of the values of the quantities (FST01) for each FST segment.

Segment: **ST Transaction Set Header**

Position: 010

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To indicate the start of a transaction set and to assign a control number

Syntax Notes:

Semantic Notes: The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

Comments:

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>	
M	ST01	143	Transaction Set Identifier Code		M ID 3/3
			Code uniquely identifying a Transaction Set		
			830	Planning Schedule with Release Capability	
M	ST02	329	Transaction Set Control Number		M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set		

Segment: BFR Beginning Segment for Planning Schedule

Position: 020

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To indicate the beginning of a planning schedule transaction set; whether a ship or delivery based forecast; and related forecast envelope dates

Syntax Notes: At least one of BFR02 or BFR03 is required.

Semantic Notes:

1. If BFR01 contains the value "04" (Net Change), BFR09 is required.
2. BFR02 is the identifying number for a forecast assigned by the orderer/purchaser.
3. BFR06 is the forecast horizon start date: The date when the forecast horizon (envelope) begins.
4. BFR07 is the forecast horizon end date: The date when the forecast horizon (envelope) ends.
5. BFR08 is the date forecast generated: The date the forecast data was generated.
6. BFR09 is the date forecast updated: The date the forecast was updated with "net change" data. (Used only when data element 353 in BFR01 contains the value "04", meaning net change.)

Comments:

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>		
M	BFR01	353	Transaction Set Purpose Code		M	ID 2/2
			Code identifying purpose of transaction set			
			00	Original		
			04	Change		
			05	Replace		
	BFR03	328	Release Number		X	AN 1/30
			Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction			
M	BFR04	675	Schedule Type Qualifier		M	ID 2/2
			Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast			
			DL	Delivery Based		
			SH	Shipment Based		
M	BFR05	676	Schedule Quantity Qualifier		M	ID 1/1
			Code identifying the type of quantities used when defining a schedule or forecast			

A Actual Discrete Quantities

BFR06 373 Release Date O DT 8/8

Date expressed as CCYMMDD

This is for the outbound 830.

BFR08 373 Release Date O DT 8/8

Date expressed as CCYMMDD

This is for the inbound 830.

BFR11 324 Purchase Order Number O AN 1/22

Identifying number for Purchase Order assigned by the orderer/purchaser

Segment: N1 Name
Position: 230
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes: 1 At least one of N102 or N103 is required.
 2 If either N103 or N104 is present, then the other is required.
Semantic Notes:
Comments: 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
 2 N105 and N106 further define the type of entity in N101.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes		
M	N101	98	Entity Identifier Code		M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual		
			MI Planning Schedule/Material Release Issuer		
			ST Ship To		
			SU Supplier/Manufacturer		
	N102	93	Name		X AN 1/60
			Free-form name		
	N103	66	Identification Code Qualifier		X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)		
			1 D-U-N-S Number, Dun & Bradstreet		
			92 Assigned by Buyer or Buyer's Agent		
	N104	67	Identification Code		X AN 2/80
			Code identifying a party or other code		

Segment: **LIN** Item Identification
Position: 010
Loop: LIN Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify basic item identification data
Syntax Notes: 1 If either LIN04 or LIN05 is present, then the other is required.
2 If either LIN06 or LIN07 is present, then the other is required.
3 If either LIN08 or LIN09 is present, then the other is required.
4 If either LIN10 or LIN11 is present, then the other is required.
5 If either LIN12 or LIN13 is present, then the other is required.
Semantic Notes: 1 LIN01 is the line item identification
Comments: 1 See the Data Dictionary for a complete list of IDs.
2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes	
	LIN01	350	Assigned Identification	O AN 1/20
			Alphanumeric characters assigned for differentiation within a transaction set	
M	LIN02	235	Product/Service ID Qualifier	M ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
		BP	Buyer's Part Number	
M	LIN03	234	Product/Service ID	M AN 1/48
			Buyer's Part Number	
	LIN04	235	Product/Service ID Qualifier	X ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
		PO	Purchase Order Number	
	LIN05	234	Product/Service ID	X AN 1/48
			Purchase Order Number (when applicable)	
	LIN06	235	Product/Service ID Qualifier	X ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
		PL	Purchaser's Order Line Number	

LIN07	234	Product/Service ID	X	AN 1/48
		Purchase Order Line Number (when applicable)		
LIN08	235	Product/Service ID Qualifier	X	ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		EC Engineering Change Level		
LIN09	234	Product/Service ID	X	AN 1/48
		Engineering Change Level (when applicable)		
LIN10	235	Product/Service ID Qualifier	X	ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		RY Record Keeping or Model Year		
LIN11	234	Product/Service ID	X	AN 1/48
		Model Year (when applicable)		
LIN12	235	Product/Service ID Qualifier	X	ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		PD Part Number Description		
LIN13	234	Product/Service ID	X	AN 1/48
		Buyer's Part Description (when applicable)		

Segment: **UIT** Unit Detail
Position: 020
Loop: LIN Mandatory
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify item unit data
Syntax Notes: 1 If UIT03 is present, then UIT02 is required.
Semantic Notes:
Comments:

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>	
M	UIT01	C001	Composite Unit of Measure		M
			To identify a composite unit of measure (See Figures Appendix for examples of use)		
M	C00101	355	Unit or Basis for Measurement Code		M ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
			EA	Each	
			PC	Piece	

Segment: **REF** Reference Identification
Position: 140
Loop: LIN Mandatory
Level: Detail
Usage: Optional
Max Use: 12
Purpose: To specify identifying information
Syntax Notes: 1 At least one of REF02 or REF03 is required.
2 If either C04003 or C04004 is present, then the other is required.
3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes: 1 REF04 contains data relating to the value cited in REF02.
Comments:

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>	
M	REF01	128	Reference Identification Qualifier		M ID 2/3
			Code qualifying the Reference Identification		

		DK	Dock Number	
REF02	127	Reference Identification		X AN 1/30
		Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		

Segment: **PER Administrative Communications Contact**
Position: 150
Loop: LIN Mandatory
Level: Detail
Usage: Optional
Max Use: 3
Purpose: To identify a person or office to whom administrative communications should be directed
Syntax Notes: 1 If either PER03 or PER04 is present, then the other is required.
 2 If either PER05 or PER06 is present, then the other is required.
 3 If either PER07 or PER08 is present, then the other is required.
Semantic Notes:
Comments:

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	PER01	366	Contact Function Code	M ID 2/2
			Code identifying the major duty or responsibility of the person or group named	
			IC Information Contact	
	PER02	93	Name	O AN 1/60
			Free-form name	
	PER03	365	Communication Number Qualifier	X ID 2/2
			Code identifying the type of communication number	
			TE Telephone	
	PER04	364	Communication Number	X AN 1/80
			Complete communications number including country or area code when applicable	
	PER05	365	Communication Number Qualifier	X ID 2/2
			Code identifying the type of communication number	
			FX Facsimile	
	PER06	364	Communication Number	X AN 1/80
			Complete Facsimile number including country or area code when applicable	
	PER07	365	Communication Number Qualifier	X ID 2/2
			Code identifying the type of communication number	

		EM	Electronic Mail		
PER08	364	Communication Number		X	AN 1/80
		Complete Email address when applicable			

Segment: ATH Resource Authorization
Position: 230
Loop: LIN Mandatory
Level: Detail
Usage: Optional
Max Use: 20
Purpose: To specify resource authorizations (i.e., finished labor, material, etc.) in the planning schedule

Syntax Notes: 1 At least one of ATH02 or ATH03 is required.
 2 If ATH03 is present, then ATH05 is required.
 3 If ATH04 is present, then ATH05 is required.

Semantic Notes: 1 ATH02 is the resource authorization through date: The date through which the buyer authorizes the seller to commit the resource defined in element ATH01.
 2 ATH03 is the current cumulative requirements quantity: The cumulative quantity that has been authorized to date from the cumulative start date (ATH05) through the resource authorization through date (ATH02).
 3 ATH05 is the cumulative start date: The date where the cumulative quantity count starts. This date might be the start date of a contract period, a calendar or fiscal year, or other.

Comments: 1 It is imperative that negotiations defining financial commitment have previously occurred and are agreed to by both buyer and seller.
 2 ATH04 is the maximum cumulative requirements quantity: The maximum cumulative quantity that has been authorized to date from the cumulative start date (ATH05) through the resource authorization through date (ATH02). This is a high water mark. If the forecast decreases, the current cumulative requirements quantity also decreases, but the maximum cumulative requirements quantity does not decrease.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes		
M	ATH01	672	Resource Authorization Code		M ID 2/2
			Code identifying the resource which the buyer is authorizing the seller to commit to		
			FI	Finished (Labor, Material, and Overhead/Burden)	
			MT	Material	
			PQ	Cumulative Quantity Required Prior to First Schedule Period	
	ATH03	380	Quantity		X R 1/15
			Numeric value of quantity		
	ATH05	373	Date		X DT 8/8
			Date expressed as CCYYMMDD		

Segment: **FST Forecast Schedule**
Position: 410
Loop: FST Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify the forecasted dates and quantities
Syntax Notes: **1** If either FST06 or FST07 is present, then the other is required.
2 If either FST08 or FST09 is present, then the other is required.
Semantic Notes: **1** If FST03 equals "F" (indicating flexible interval), then FST04 and FST05 are required. FST04 would be used for the start date of the flexible interval and FST05 would be used for the end date of the flexible interval.
Comments: **1** As qualified by FST02 and FST03, FST04 represents either a discrete forecast date, the first date of a forecasted bucket (weekly, monthly, quarterly, etc.) or the start date of a flexible interval.
2 FST06 qualifies the time in FST07. The purpose of the FST07 element is to express the specific time of day in a 24-hour clock to satisfy "just-in-time" requirements. As an alternative, the ship/delivery pattern segment (SDP) may be used to define an approximate time, such as a.m. or p.m.

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>	
M	FST01	380	Quantity		M R 1/15
			Numeric value of quantity		
M	FST02	680	Forecast Qualifier		M ID 1/1
			Code specifying the sender's confidence level of the forecast data or an action associated with a forecast		
			C	Firm	
			D	Planning	
M	FST03	681	Forecast Timing Qualifier		M ID 1/1
			Code specifying interval grouping of the forecast		
			C	Daily	
			D	Discrete	
			M	Monthly Bucket (Calendar Months)	
			W	Weekly Bucket (Monday through Sunday)	
M	FST04	373	Requirement Date		M DT 8/8
			Date expressed as CCYYMMDD		
	FST07	337	Time		X TM 4/8

Time expressed in 24-hour clock time as follows: HHMMSSD, where H = hours (00-23), M = minutes (00-59) and S = integer seconds (00-59)

FST08 **128** **Reference Identification Qualifier** **X** **ID 2/3**

Code qualifying the Reference Identification

DO Delivery Order Number

This qualifier will be used for inbound and outbound files.

KB Beginning Kanban Serial Number

This qualifier will be used with inbound files only.

FST09 **127** **Reference Identification** **X** **AN 1/30**

Dealer Order Number or Pull Signal (when applicable)

Segment: **SHP** Shipped/Received Information
Position: 470
Loop: SHP Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify shipment and/or receipt information
Syntax Notes: **1** If SHP01 is present, then SHP02 is required.
2 If SHP03 is present, then at least one of SHP04 or SHP05 is required.
3 If SHP04 is present, then SHP03 is required.
4 If SHP05 is present, then SHP03 is required.
Semantic Notes: **1** SHP04 is the date shipped, delivered, received, or the cumulative quantity start date (as qualified by SHP03).
2 SHP06 is the cumulative quantity end date.
Comments: **1** The SHP segment is used to communicate shipment, delivery, or receipt information and may include discrete or cumulative quantities, dates, and times.
2 If SHP01 equals "02", "07", "08", "09", or "10" (indicating cumulative quantities), then SHP04 and SHP06 are required to identify the start and end dates of the quantity count.

Data Element Summary

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
SHP01	673	Quantity Qualifier	O ID 2/2
		Code specifying the type of quantity	
		01 Discrete Quantity	
		02 Cumulative Quantity	
		12 Ship Notice Quantity	
SHP02	380	Quantity	X R 1/15
		Numeric value of quantity	
SHP03	374	Date/Time Qualifier	X ID 3/3
		Code specifying type of date or time, or both date and time	
		011 Shipped	
		050 Received	
		051 Cumulative Quantity Start	
SHP04	373	Date	X DT 8/8
		Date expressed as CCYYMMDD	

Segment: REF Reference Identification
Position: 480
Loop: SHP Optional
Level: Detail
Usage: Optional
Max Use: 5
Purpose: To specify identifying information
Syntax Notes: 1 At least one of REF02 or REF03 is required.
 2 If either C04003 or C04004 is present, then the other is required.
 3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes: 1 REF04 contains data relating to the value cited in REF02.
Comments:

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>	
M	REF01	128	Reference Identification Qualifier		M ID 2/3
			Code qualifying the Reference Identification		
			SI	Shipper's Identifying Number for Shipment (SID)	
				A unique number (to the shipper) assigned by the shipper to identify the shipment	
	REF02	127	Reference Identification		X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		

Segment: CTT Transaction Totals
Position: 010
Loop:
Level: Summary
Usage: Optional
Max Use: 1
Purpose: To transmit a hash total for a specific element in the transaction set
Syntax Notes: 1 If either CTT03 or CTT04 is present, then the other is required.
 2 If either CTT05 or CTT06 is present, then the other is required.
Semantic Notes:
Comments: 1 This segment is intended to provide hash totals to validate transaction completeness and correctness.

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>	
M	CTT01	354	Number of Line Items		M NO 1/6
			Total number of line items in the transaction set		
	CTT02	347	Hash Total		O R 1/10
			Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example: -.0018 First occurrence of value being hashed. .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. ----- 1855 Hash total prior to truncation. 855 Hash total after truncation to three-digit field.		

Segment: SE Transaction Set Trailer
Position: 020
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)
Syntax Notes:
Semantic Notes:
Comments: 1 SE is the last segment of each transaction set.

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>	
M	SE01	96	Number of Included Segments		M NO 1/10
			Total number of segments included in a transaction set including ST and SE segments		

Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

Generic Planning Schedule Example

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ISA*00*                *00*                *ZZ*KARENSCUST        *ZZ*X12SUPPLIER
*040728*1446*U*00400*000000021*0*P~
GS*PS*KARENSCUST*X12SUPPLIER*20040728*1446*21*X*004010
ST*830*0001
BFR*00**Rel-X12*DL*A***20040715
N1*ST*Ship To 10*ZZ*10
N1*SU*X12 Supplier*ZZ*X12SUPPLIER
N1*MI*FACILITY ID: 10*ZZ*10
LIN*1*BP*X12-Part01*****EC*ECL***PD*X12-Part01 Description
UIT*EA
PER*SC*ContactName*TE*ContactPhone*EM*Contact@email.com*FX*ContactFax
ATH*PQ**1000**20040701
ATH*FI**200000**20040701
ATH*MT**175000**20040701
FST*11000*D*M*20040801
FST*26000*D*W*20040901
FST*41000*D*W*20041001
FST*81000*D*W*20041101
FST*121000*D*W*20041201
FST*161000*D*W*20050101
SHP*02*1000*011*20040715
SHP*02*1000*050*20040715
LIN*2*BP*X12-Part02*****EC*ECL***PD*X12-Part02 Description
UIT*EA
PER*SC*ContactName*TE*ContactPhone*EM*Contact@email.com*FX*ContactFax
ATH*PQ**1000**20040701
ATH*FI**200000**20040701
ATH*MT**175000**20040701
FST*11000*D*M*20040801
FST*26000*D*W*20040901
FST*41000*D*W*20041001
FST*81000*D*W*20041101
FST*121000*D*W*20041201
FST*161000*D*W*20050101
SHP*02*1000*011*20040715
SHP*02*1000*050*20040715
LIN*3*BP*X12-Part03*****EC*ECL***PD*X12-Part03 Description
UIT*EA
PER*SC*ContactName*TE*ContactPhone*EM*Contact@email.com*FX*ContactFax
ATH*PQ**1000**20040701
ATH*FI**200000**20040701
ATH*MT**175000**20040701
FST*11000*D*M*20040801
FST*26000*D*W*20040901
FST*41000*D*W*20041001
FST*81000*D*W*20041101
FST*121000*D*W*20041201
FST*161000*D*W*20050101
SHP*02*1000*011*
SHP*02*1000*050*20040715
LIN*4*BP*Kanban-01*****EC*ECL***PD*Kanban-01 Description
UIT*EA
PER*SC*ContactName*TE*ContactPhone*EM*Contact@email.com*FX*ContactFax
ATH*PQ**1000**20040701
ATH*FI**100000**20040701
ATH*MT**150000**20040701
FST*11000*D*M*20040801
FST*26000*D*W*20040901
    
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FST*41000*D*W*20041001
SHP*02*1000*011*
SHP*02*1000*050*20040715
LIN*5*BP*Kanban-02*****EC*ECL***PD*Kanban-02 Description
UIT*EA
PER*SC*ContactName*TE*ContactPhone*EM*Contact@email.com*FX*ContactFax
ATH*PQ**1000**20040701
ATH*FI**100000**20040701
ATH*MT**150000**20040701
FST*11000*D*M*20040801
FST*26000*D*W*20040901
FST*41000*D*W*20041001
SHP*02*1000*011*
SHP*02*1000*050*20040715
LIN*6*BP*Kanban-03*****EC*ECL***PD*Kanban-03 Description
UIT*EA
PER*SC*ContactName*TE*ContactPhone*EM*Contact@email.com*FX*ContactFax
ATH*PQ**1000**20040701
ATH*FI**100000**20040701
ATH*MT**150000**20040701
FST*11000*D*M*20040801
FST*26000*D*W*20040901
FST*41000*D*W*20041001
SHP*02*1000*011*
SHP*02*1000*050*20040715
CTT*6
SE*76*0001
GE*1*21
IEA*1*000000021