

# TSO Industry Update Code Progress

27<sup>th</sup> May 2015



#### **Presentation Structure**

- Congestion Management Procedures
- Balancing and Scheduling
- Tripartite Agreement
- Moffat Agency Contingency
- PRISMA Registration



## **Congestion Management Procedures (CMP)**



#### What are Congestion Management Procedures?

#### What are the aims of Congestion Management Procedures (CMP)?

- To address the issue of contractual congestion at Interconnection Points
- The CMP rules aim to:
  - Maximise the capacity which is available to Shippers and
  - Bring unused capacity back to the market to be resold through regular capacity booking procedures (i.e. auctions)

#### What is contractual congestion?

• Contractual congestion is where Shippers cannot gain access to capacity despite the physical availability of such capacity

#### Who applies the rules and where are they applied?

- Moffat Entry Point: PTL
- South North Entry Point: GNI(UK)



- Four distinct mechanisms are required:
  - Surrender of Contracted Capacity
  - Long Term Use It or Lose It
  - Oversubscription and Buyback
  - Firm Day Ahead Use It or Lose It
- Firm Day Ahead Use It or Lose It
  - Not required to be implemented until 1st July 2016, and
  - Then only if required by the National Regulatory Authority (NRA) following review of the other mechanisms
- The other mechanisms are currently implemented in the NI regime



#### **Changes Required**

- Main driver for change is the move from a 'Point-to-Point' regime to an 'Entry-Exit' regime
- Current arrangements focus on Exit capacity which is currently linked to Entry Capacity
- In future, mechanisms will only apply to firm IP Entry Capacity
- Changes to the Incentive Scheme of the NI TSOs to provide Oversubscription Capacity via the Oversubscription and Buyback mechanism also required



#### **Additional and Allocable IP Entry Capacity**

• Additional IP Entry Capacity is defined as:

*IP Entry Capacity which may be made available by (the relevant NI TSO) as a result of the application of congestion management procedures* 

- Amount of IP Entry Capacity published as available
  - No distinction between IP Entry Capacity which has originated from the various CMP mechanisms or otherwise
- Therefore, a single aggregate figure of Allocable IP Entry Capacity published, potentially comprising:
  - Unsold Technical IP Entry Capacity
  - IP Entry Capacity offered for Surrender
  - UIOLI Capacity
  - Oversubscription Capacity



#### **Merit Order**

- Where Additional IP Entry Capacity is sold, NI TSOs must use defined merit order when allocating IP Entry Capacity to purchasing Shippers
- IP Entry Capacity will be allocated by the NI TSOs in accordance with the following merit order:
  - 1. Unsold Technical IP Entry Capacity
  - 2. IP Entry Capacity offered for Surrender
  - 3. UIOLI Capacity
  - 4. Oversubscription Capacity



## Activation Test (1 of 2)

- Before the implementation of any CMP mechanisms the NI TSOs need to determine whether there is contractual congestion
- Therefore, NI TSOs shall perform an activation test on an annual basis

#### **Activation Test**

- If:
- a) all the Technical Capacity for Gas Year Y or a quarter in Gas Year Y which was offered in the Annual Yearly Auction and/or the Annual Quarterly Auction was sold out (or none was available to be offered); and
- b) Shippers bid for firm IP Entry Capacity in either the Annual Yearly Auction and/or the Annual Quarterly Auction but were unable to obtain it;

then the NI TSO's shall determine that contractual congestion exists at the relevant IP



## Activation Test (2 of 2)

- Where contractual congestion is determined to exist at an IP:
  - The CMP Mechanisms shall be activated by the relevant NI TSO for that IP
  - With effect from the start of Gas Year Y
- NI TSOs may activate any or all of the CMP Mechanisms, in respect of either or both IPs, at any time within the Gas Year
  - Subject to written approval from the Utility Regulator
- Where the NI TSOs activate one or more CMP Mechanism within a Gas Year:
  - They shall inform Shippers of the date from which the mechanism(s) will be activated, giving [6 months] notice
- Contractual congestion at one of the IPs does not imply or require that the CMP Mechanisms are to be activated in respect of the other IP



#### Surrender of Capacity (1 of 2)

- Once the activation test has been passed and/or CMP Mechanisms have been activated, Shippers may offer to surrender an amount of IP Entry Capacity to the relevant NI TSO at the IP
- Relevant IP Entry Capacity auctions for which a Shipper may offer to surrender IP Entry Capacity are:
  - Annual Yearly IP Entry Capacity Auction
  - Annual Quarterly IP Entry Capacity Auction
  - Monthly IP Entry Capacity Auctions
- Surrendered IP Entry Capacity is made available to other Shippers directly on the PRISMA Auction Platform



### Surrender of Capacity (2 of 2)

- A Shipper offering IP Entry Capacity for surrender to its NI TSO retains its rights and obligations with respect to the IP Entry Capacity, until the effective date of the purchasing Shipper's capacity booking:
  - Shipper retains right to nominate against the IP Entry Capacity
  - Shipper remains liable for all IP Entry Capacity charges
  - Shipper remains liable for Financial Security commitment
- IP Entry Capacity offered for surrender will only be sold (allocated to a new Shipper as a result of an Auction) after all Unsold Technical IP Entry Capacity has been sold



### Long Term Use It or Lose It (1 of 3)

- Once the activation test has been passed, NI TSOs shall commence monitoring of Shipper's IP Entry Capacity utilisation under the LTUIOLI rules
- Only Shippers holding IP Entry Capacity with an effective duration greater than one year at the start of Gas Year Y shall be subject to utilisation monitoring
- Shippers who **systematically underutilise** their IP Entry Capacity may have capacity fully or partially withdrawn
  - If there is sufficient demand for IP Entry Capacity from other Shippers at the relevant IP



### Long Term Use It or Lose It (2 of 3)

- For the purposes of monitoring a Shipper's utilisation of IP Entry Capacity, the NI TSO at the relevant IP will produce two Usage Reports each year:
  - a) one by 30th April covering the period 1st October 31st March of the Gas Year; and
  - b) the other by 31st October covering the period 1st April 30th September of the previous Gas Year.
- The Usage Reports will assess for each relevant Shipper, whether it:
  - a) used less than 80% of its Available IP Entry Capacity (either bought as Yearly IP Entry Capacity and/or other IP Entry Capacity with effectively longer than annual duration) for two consecutive six monthly reporting periods; or
  - b) systematically renominated downwards from close to 100% of its Available IP Entry Capacity (in order to circumvent the rules on renomination in the 'Firm Day Ahead Use It or Lose It' mechanism)
- Once CMP Mechanisms activated, Usage Reports will be generated and provided to the Utility Regulator
  - Irrespective of whether there is an unfulfilled demand for IP Entry Capacity by a Shipper



### Long Term Use It or Lose It (3 of 3)

- The relevant NI TSO shall request the underutilising Shipper to provide justification for its utilisation, and shall give three months' notice of the intention to withdraw IP Entry Capacity
- Shipper have an opportunity to appeal the decision, in line with the process below:





## **Oversubscription and Buyback (1 of 3)**

- Once the activation test has been passed and/or CMP Mechanisms have been activated, NI TSOs shall offer "Oversubscription Capacity" at the relevant IP
- Oversubscription Capacity means IP Entry Capacity exceeding the Technical IP Entry Capacity which can be offered in accordance with the Oversubscription and Buyback Incentive Scheme at the IP, on a Gas Flow Day
- If the relevant NI TSO subsequently becomes aware that it will be unable to deliver the required physical flows, it may initiate a market-based buyback procedure
- In such an instance, Shippers will be invited to sell IP Entry Capacity back to the NI TSO, specifying the price they wish to be paid
- Where the NI TSO buys back IP Entry Capacity from a Shipper
  - The Shipper shall remain liable for payment of all capacity-related charges (and maintaining credit cover for such charges), but
  - Shall receive a credit (at the price specified by the Shipper) with respect to the amount of IP Entry Capacity bought back by the NI TSO







### **Oversubscription and Buyback (3 of 3)**

- Revenues from the sale of oversubscription capacity at an IP will be passed by the NI TSO into an 'OS & BB Account' for that IP
- When an NI TSO buys back capacity, it will do so only up to a capped level
  - Cap = the total revenue which has been collected in the relevant OS & BB Account associated with the relevant IP during the preceding 3 months.
- The NI TSOs will operate separate incentive schemes in respect of each IP
  - Therefore each will hold an OS & BB Account associated with the relevant IP
- No change proposed to the TSO / Shipper split of revenues:
  - 75% Shipper / 25% TSO
- Shippers at an IP will be allocated a share of the revenues in the OS & BB Account associated with that IP, pro-rata to their total IP Entry Allocations at the relevant IP for the Gas Year, after the end of the Gas Year



# **Balancing and Scheduling**



- Key notes from the Business Rules:
  - Aggregate imbalance position for each Shipper
    - As opposed to calculating multiple balance positions by 'contract path'
  - Single aggregate imbalance tolerance percentage
  - Interim Measures Approach: Shipper balancing tolerances will be retained
    - For a transitional period at least
  - No plans to change the tolerance levels at this time
  - NI TSOs have agreed that, from 1st October 2015, there shall only be one Postalised Network Disbursement Bank Account
    - Operated by PTL on behalf of the NI TSOs
  - No changes proposed to Shrinkage Gas calculations
  - Current Gas Balancing Contracts to be utilised, with some minor amendments
    - For a further period of one Gas Year starting from October 2015
  - NI TSOs are intending to develop and consult on potential changes to the Balancing Gas Contracts
    - To enable Balancing Gas to be supplied to the NI TSOs at the NI BP



#### **Aggregate NI Imbalance**

- Aggregate NI Imbalance = Aggregate NI Entry Allocation <sub>D</sub> Aggregate NI Exit Allocation <sub>D</sub>
- Aggregate NI Entry Allocation  $_{D} = \Sigma$  Final IP Entry Allocations  $_{D} + \Sigma$  Trade Buy Allocations  $_{D}$
- Aggregate NI Exit Allocation  $_{D} = \Sigma$  Final Exit Allocations  $_{D} + \Sigma$  Final VRF IP Exit Allocations  $_{D} + \Sigma$  Trade Sell Allocations  $_{D}$
- A **"Negative Imbalance"** is where the Shippers' Aggregate NI Entry Allocation is less than its Aggregate NI Exit Allocation on any Gas Flow Day
- A "**Positive Imbalance**" is where the Shippers' Aggregate NI Entry Allocation exceeds its Aggregate NI Exit Allocation on any Gas Flow Day



#### **Aggregate NI Imbalance Example**

Entry Allocations	Quantity
$\Sigma$ Final IP Entry Allocations <sub>D</sub>	150
$\Sigma$ Trade Buy Allocations <sub>D</sub>	0
Aggregate NI Entry Allocation <sub>D</sub>	150

Exit Allocations	Quantity
$\Sigma$ Final Exit Allocations <sub>D</sub>	125
$\Sigma$ Trade Sell Allocations <sub>D</sub>	0
$\Sigma$ Final VRF Exit Allocations <sub>D</sub>	0
Aggregate NI Exit Allocation <sub>D</sub>	125

Imbalance Position	Quantity
Aggregate Imbalance Position <sub>D</sub>	25



#### **Imbalance Tolerance Percentage**

- Single aggregate "Imbalance Tolerance Percentage" or "ITP" for each Shipper
  - Weighted average across all the NI Exit Points which the Shipper supplies
- No Imbalance Tolerance allowance for Entry Points
  - Gas will be allocated as nominated at IPs, and
  - No Entry Points to the NI network which are not IPs
- No Imbalance Tolerance allowance for Trades at the NI Balancing Point
  - These will also be allocated as nominated



#### **Imbalance Tolerance Percentage Calculation**

ITP (as %) = <u>100</u> x (a+b+c+d) TCvm

where:

a =  $\sum$ Cvm x Cf for Un1

 $b = \sum Cvm x Cf for Un2$ 

 $c = \sum Cvm x Cf for Un3$ 

 $d = \sum Cvm x Cf for Un4$ 

∑Cvm = max quantity (in kWh/d) required to supply all the Shippers' demand in the relevant load category on a Gas Flow Day at all NI Exit Points, as set out in the Shippers' Downstream Load Statement

TCvm = aggregate of each ∑Cvm

Un identifies the load category according to the Load Category Weighting Table



Un	Downstream Load Category	Applicable Tolerance (Cf)
1	Power Generation	3%
2	>1,456,416,000 kWh/yr	3%
3	>733,000 but < 1,456,416,000 kWh/yr	10%
4	<733,000 kWh/yr	20%



#### **Exit Point Tolerance Example**

Distribution Exit Point 1	Un	Downstream Load Category	Estimated max kWh/d to supply load category	
	1	Power Generation	0	
	2	>1,456,416,000 kWh/yr	0	
	3	>733,000 but < 1,456,416,000 kWh/yr	50	
	4	<733,000 kWh/yr	100	
Distribution Exit Point 2	Un	Downstream Load Category	Estimated max kWh/d to supply load category	
	1	Power Generation	0	
	2	>1,456,416,000 kWh/yr	0	
	3	>733,000 but < 1,456,416,000 kWh/yr	10	
	4	<733,000 kWh/yr	15	
Total	Un	Downstream Load Category	Estimated max kWh/d to supply load category	
	1	Power Generation	0	
	2	>1,456,416,000 kWh/yr	0	
	3	>733,000 but < 1,456,416,000 kWh/yr	60	
	4	<733,000 kWh/yr	115	



ITP (as %) =  $\underline{100}$  x ((0x3%) + (0x3%) + (60x10%) + (115x20%)) 175

ITP (as %) = 16.6%



#### **Imbalance Tolerance Quantity**

 In respect of a Gas Flow Day, the NI TSOs shall determine a Shippers' "Imbalance Tolerance Quantity" or "ITQ" by applying the weighted average percentage tolerance to the sum of a Shipper's Exit Allocations where:

ITQ = ITP x ( $\Sigma$  Final Exit Allocations <sub>D</sub> +  $\Sigma$  Final VRF IP Exit Allocations <sub>D</sub>)

• Example:

Exit Allocations	Quantity
Final Exit Allocation (Distribution Exit Point 1) $_{\rm D}$	110
Final Exit Allocation (Distribution Exit Point 2) $_{\rm D}$	15
$\Sigma$ Final VRF Exit Allocations <sub>D</sub>	0

- ITQ = 16.6% x ((110+15) + 0)
- ITQ = 20.8



#### **Marginal Imbalance Quantity**

 Where a Shipper's Aggregate NI Imbalance exceeds its Imbalance Tolerance Quantity on a Gas Flow Day, the NI TSOs shall determine the amount of the Shippers "Marginal Imbalance Quantity" or "MIQ" as follows:

MIQ = Aggregate NI Imbalance - ITQ

- Example:
- MIQ = 25 20.8
- MIQ = 4.2



#### **Balancing Charges - Positive Imbalance**

• On any Gas Flow Day on which a Shipper has a Positive Imbalance, a Balancing Charge shall be payable to it equal to the sum of:

(a) ITQ x Daily Gas Price; and

(b) MIQ x P<sub>smps</sub>;

where  $P_{smps}$  is the lower of:

(i) the Daily Gas Price multiplied by 0.7; or(ii) the System Marginal Sell Price on the relevant Gas Flow Day (as defined in the GB Uniform Network Code)

• Example:

(a) 20.8 x Daily Gas Price; and





### **Balancing Charges – Negative Imbalance**

• On any Gas Flow Day on which a Shipper has a Negative Imbalance, a Balancing Charge shall be payable to it equal to the sum of:

(a) ITQ x Daily Gas Price; and

(b) MIQ x P<sub>smpb</sub>;

where  $P_{smpb}$  is the higher of:

(i) the Daily Gas Price multiplied by 1.5; or(ii) the System Marginal Buy Price on the relevant Gas Flow Day (as defined in the GB Uniform Network Code)



## **Scheduling Charges**

- Scheduling Charges:
  - Difference between Final Exit Allocation and the Exit Nominated Quantity
  - Payable for each Exit Point, each Gas Flow Day
- No Scheduling Charges at IP Entry Points
  - Allocations equal nominations at these points.
- "Scheduling Difference" or "SD" shall be calculated as:

Scheduling Difference = Final Exit Allocation – Exit Nominated Quantity



#### **Scheduling Difference Example**

Exit Point	Final Exit Allocation	Exit Nomination
Distribution Exit Point 1	110	100
Distribution Exit Point 2	15	10

- Distribution Exit Point 1
- SD = 110 100
- SD = 10

- Distribution Exit Point 2
- **SD** = 15 10
- SD = 5



#### **Scheduling Tolerance Percentage Calculation**

- For each Gas Flow Day, in respect of each Exit Point for each Shipper:
- "Scheduling Tolerance Percentage" or "STP" shall be:

STP (as %) = <u>100</u> x (a+b+c+d) TCvm

where:

a = Cvm x Cf for Un1

b = Cvm x Cf for Un2

c = Cvm x Cf for Un3

d = Cvm x Cf for Un4

Cvm = max quantity (in kWh/d) required to supply all the Shippers' demand in the relevant load category on a Gas Flow Day at the relevant Exit Point as set out in the Shippers' Downstream Load Statement

TCvm = aggregate of each Cvm

Un identifies the load category according to the Load Category Weighting Table

Cf = weighting factor depending on the load category as listed in the Scheduling Tolerance Table



Un	Downstream Load Category	Applicable Tolerance (Cf)
1	Power Generation	3%
2	>1,456,416,000 kWh/yr	3%
3	>733,000 but < 1,456,416,000 kWh/yr	10%
4	<733,000 kWh/yr	20%



• Distribution Exit Point 1

STP (as %) = 100 x ((0x3%) + (0x3%) + (50x10%) + (100x20%)) 150

STP (as %) = 16.7%

• Distribution Exit Point 2

STP (as %) =  $\underline{100}$  x ((0x3%) + (0x3%) + (10x10%) + (15x20%)) 25

STP (as %) = 16.0%



### **Scheduling Tolerance Quantity**

• **"Scheduling Tolerance Quantity"** or **"STQ"** shall be determined by applying the STP to the Shipper's Exit Allocation at that Exit Point as follows:

STQ  $_{EP}$  = STP  $_{EP}$  x Final Exit Allocation  $_{EP}$ 

- Examples:
- Distribution Exit Point 1
- **STQ**<sub>EP</sub> = 16.7% x 110
- STQ <sub>EP</sub> = 18.4
- Distribution Exit Point 2
- **STQ**<sub>EP</sub> = 16.0% x 15
- STQ  $_{\rm EP}$  = 2.4



## **Scheduling Charges**

- Scheduling Charge shall be calculated:
  - For each Exit Point and each Gas Flow Day

#### Scheduling Charge $_{EP}$ = (SD – STQ $_{EP}$ ) x (5% x Daily Gas Price)

- Examples:
- In this example the DGP = 1.5p/kWh
- Distribution Exit Point 1
- SD (10) is less than the STQ (18.4) therefore no charges are applied
- Distribution Exit Point 2
- Scheduling Charge <sub>EP</sub> = (5 2.4) x (5% x 1.5)
- Scheduling Charge <sub>EP</sub> = £0.00195
- Total
- Total Scheduling Charge = £0 + £0.00195 = £0.00195



#### Disbursements

- From October 2015, PTL will issue monthly invoices to its Shippers and also, on behalf of GNI (UK), to GNI (UK) Shippers in respect of:
  - Aggregate Imbalance Charges
  - Scheduling Charges
  - Unauthorised Flow Charges
  - Monies to be charged or credited to such Shippers in respect of the purchase or sale of Balancing Gas
  - Disbursement Amounts
- NI TSOs will make the necessary arrangements for information exchange between them to support this in the NINOA



• A Shipper's **"Aggregate Throughput"** shall be determined, in respect of a Month, as:

Aggregate Throughput<sub>Shipper</sub> = (Aggregate NI Entry Allocations<sub>Shipper</sub> + Aggregate NI Exit Allocations<sub>Shipper</sub>)

- **"Total System Aggregate Throughput"** in respect of a Month :
  - Sum of all Shippers' Aggregate NI Entry Allocations and all Shipper's Aggregate NI Exit Allocations
- For each Shipper, in respect of a Month, a "Disbursement Ratio" shall be calculated as follows:

Disbursement Ratio <sub>Shipper</sub> = <u>Aggregate Throughput <sub>Shipper</sub></u> Total System Aggregate Throughput



#### Disbursements

• For each Shipper, in respect of each Month a Disbursement charge/payment shall be determined as the sum of:

(a) ∑ Imbalance Charges received(net) x Disbursement Ratio <sub>Shipper</sub>

- (b) ∑Scheduling Charges received x Disbursement Ratio <sub>Shipper</sub>
- (c) ∑Unauthorised Flow Charges received x Disbursement Ratio Shipper
- (d) ∑Balancing Gas Costs (net) x Disbursement Ratio Shipper



# **Tripartite Agreement**



#### **Nominations Contractual Framework**



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### **Tripartite Agreement**

- The Tripartite Agreement is being developed to record the arrangements associated with GB and NI nomination processing
- The Agreement also covers the GB/NI bundling arrangements and the basis on which Shippers are allocated their gas at the IP
- Parties:
  - PTL
  - NGG
  - GNI(UK)
- The parties are aiming to consult on the Agreement at the end of June, inviting comments on particular areas such as the nomination matching arrangements



# **Moffat Agency Contingency**



#### **Moffat Agent Contingency**

- All TSOs are on track to have their IT system changes ready for 1st October 2015
- Discussions between the TSOs on the Moffat Agency contingency are ongoing
- PTL are reviewing the potential impact of this contingency
- Industry will be informed of any action they may need to take



# **PRISMA Registration**



### Introduction

- Shippers will be able to register on PRISMA and select PTL as their TSO by the end of June
  - PTL will inform Shippers when this date has been finalised
- PTL recommend that all Shippers who wish to use PRISMA are registered by the end of July
- Registration prerequisites:
  - EIC
  - Authorised Persons list to PTL



## **Platform Role Definitions**

#### **Guests (unregistered)**

- Everyone no registration or login is required
- Guests can look at all publicly available information

#### **Shipper Users**

- Has the right to trade capacities with the TSOs and other shippers
- A shipper can have multiple users
- All users can be authorised for both primary and secondary capacity trading



#### **TSO Users**

• Role for performing non-configurative tasks of the TSOs like activating/deactivating shippers.

#### **TSO Admin**

• Admin role can configure TSO specific values and the manage TSO documents.



## **The Registration Process**

- A single user of a shipper can only acquire primary transport capacities or trade secondary capacity on the platform on behalf of their company after they have been activated by the respective TSO
- Individual users of a shipper who would like to join the platform have to complete the registration process
- If a shipper company is not yet registered, the registration of the shipper takes place with the registration of its first user:
  - A separate registration of the shipper company is not possible
- In order to trade on the secondary market of the PRISMA platform <u>NO</u> separate registration is required
- If no longer needed, the shippers as well as their users can be deactivated
- In order to register to the platform shippers need an EIC Code

After a registration the user receives a personal account and token. The <u>account must not be shared</u> with other company members and the <u>token is not transferrable</u> to other users!



#### Process model of how to register on the platform





## **Getting started on the PRISMA platform**





### **Step 1: Check and complete the company data**

Registration					
Progress:	Company Information	2 Contacts	3 User Information	Assignment of a TSO	5 Checking Information
Check and Complete y	our Company Informa	ition		Required fiel	lds are marked with a *. 🔋
Company Information			Bank Inform	ation	
Entry / Confirmation	n of Your Company Inform	ation sport customer.	Bank *		
			IBAN *		
EIC code			BIC *		
DVGW code		Q	Tax Informat	tion	
Company Name * On behalf of my company I agree to the publication of my company's name on PRISMA.			Informat	tion for VAT Number.	
Street and Number *			VAT Number *		
Postcode and City *			I hereby co	onfirm the accuracy of the company infor	rm
Country *	Choose Country	<b>•</b>			Enter company d
P.O. Box					
Postcode and City P.O. Box					
Billing Address					
Your billing address is the	e same as the company a	address.			
Set a different billing addre	ess.				
Back to previous step					Cancel Next Step



#### Step 2: Check and complete the contacts





#### **Step 3: Enter the user details**



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### **Step 4: Select one or more TSOs**





## Step 5: Check your entered data and enter national identifiers





### **Finalising the registration & following steps**





Activity	Timeframe
Initial Application Form	1 Day
TSO Validation of Shipper	Up to 10 Business Days
Delivery of Hardware Token	Approx. 5 days

#### Mobile Token

- Alternative to Hardware Token
- In order to use the mobile token, you have to have a mobile device where you are allowed to install the VASCO digipass app
- The app is available for iOS, android, blackberry and windows phones
- For further information please refer to the VASCO website
- You will receive an email with a link to install the app and assign your device after your registration has been successfully processed



# **Questions?**

