

NEXT GENERATION NETWORKS

Communication and Engagement Report April 2018

Electric Nation



Report Title	:	Electric Nation Communications and Engagement Report April 2018
Report Status	:	Final
Project Ref	:	
Date	:	20.04.18

	Document Control	
	Date	
Prepared by:	Adam Langford	20.04.2018
Reviewed by:	Mike Potter	25.04.2018
Approved (WPD):	Mark Dale	02.05.2018

Revision History										
Date	Issue	Status								
20.04.18	0.1	Initial draft								
25.04.18	0.2	Draft for WPD								
02.05.18	0.3	Review comments WPD								
02.05.18	0.4	Approved Final Version								



Contents

1	Introduction	. 4
2	Customer Engagement	. 4
2.1	Overview of Customer Engagement	.4
2.2	Overview of Data Protection Strategy	.5
2.3	Qualification of customers	.5
3	Marketing Phase	. 6
3.1	Website	.6
3.2	Event Days	.7
3.3	Overview of lead sources	.7
3.4	Social Media	.7
3.5	AdWords	.8
3.6	Customer Newsletter	.8
4	Installation Process	. 8
4.1	Self-Survey Process	.8
4.2	Order Process	. 10
5	Customer Management	.11
5.1	Complaint/positive feedback	. 11
5.2	Customer support line	. 12
6	Fault logging and management processes	.13
6.1	Fault recording process	.13
7	Learning reference communications process	.15

The following copyright disclaimer should be included on all IFI and LCNF publications with immediate effect. The first section should be deleted for external documents.

WESTERN POWER DISTRIBUTION (WPD) IN CONFIDENCE

This is an internal WPD document. Recipients may not pass this document to any person outside the organisation without written consent.

DISCLAIMER

Neither WPD, nor any person acting on its behalf, makes any warranty, express or implied, with respect to the use of any information, method or process disclosed in this document or that such use may not infringe the rights of any third party or assumes any liabilities with respect to the use of, or for damage resulting in any way from the use of, any information, apparatus, method or process disclosed in the document.

© Western Power Distribution 2018

No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means electronic, mechanical, photocopying, recording or otherwise, without the written permission of the Future Networks Manager, Western Power Distribution, Herald Way, Pegasus Business Park, Castle Donington. DE74 2TU. Telephone +44 (0) 1332 827446. E-mail <u>WPDInnovation@westernpower.co.uk</u>



Glossary

Abbreviation	Term
EV	Electric vehicle
EN	Electric Nation
WPD	Western Power Distribution
CRM	Customer Relationship Management
GDPR	General Data Protection Regulation
PIVDCS	PIV Demand Control Services (or Demand Management Services)



1 Introduction

This report details all communications and engagement updates for the Electric Nation project from February to April 2018. DriveElectric handles all customer facing activity for the project. This includes: recruiting, qualifying, processing, and supporting the participants once the charger has been installed.

2 Customer Engagement

2.1 Overview of Customer Engagement

During this quarter DriveElectric focused on increasing the number of approved applications with 79 approved applications added this quarter – as of the 23rd April, 678 applications have been approved by the installers. This is 22 approvals short of the original project target however it has been agreed with the project partners that this is acceptable due to uncontrollable external factors such as delayed delivery of EVs. Furthermore, 106 installations have been added this quarter taking the total installed to 640 (figure 1). To increase customer satisfaction and manage their expectations of the project, DriveElectric has utilised a 'reserve list'.

DriveElectric created a 'reserve list' at the start of 2018 with the aim to manage the flow of applications to the project. Despite the reserve list creation, it was not utilised until February. From February prospective participants were informed on the EN website application form that they have been entered onto a reserve list and that a space cannot be guaranteed due to the high demand for the project – this allowed DriveElectric to manage the customers' expectations and ensure the project was not oversubscribed.

	As of 23rd April, 2018
Installed	640
In Process	38
Total (installed + active applications)	678
Available spaces on project	22

Figure 1 – Total installed and active applications.

This quarter the recruitment, and subsequently the qualification processes of prospective participants reduced due to the number of available spaces. The recruitment phase of the project ceased in April 2018 with the number fluctuating around 700 due to the unpredictability of vehicle delivery times causing drop outs. The final figure will be 678 installations.



2.2 Overview of Data Protection Strategy

DriveElectric use Dropbox to store customers survey information, including photos and documents. DriveElectric enquired to ensure that Dropbox is compliant with the new GDPR regulations; Dropbox has been approved as GDPR compliant.

2.3 Qualification of customers

Throughout the project's recruitment and qualification stage DriveElectric has amended the process based on the participant's feedback and lessons learned. This has been vital in increasing the overall experience for the participant to ensure it is as fluid and efficient as possible. Amendments to the qualification process were made during February – April 2018; the following changes have been made from the qualification process since the January 2018 report:

Reserve list utilisation: As mention in the previous report, DriveElectric created a reserve list In January 2018 to monitor the inflow and assignment of new prospective participants. The aim was to manage the customers expectation of gaining a place on the project, which DriveElectric anticipated would be oversubscribed in the final few months of recruitment. Although this was created at the start of 2018, it was not utilised until February as there were enough spaces for the demand.

The EN website highlighted that a reserve list was in use. Additionally, upon completion of the EN web application form the prospective participants were informed, after submitting their application, that they had been placed on a reserve list and cannot be guaranteed a place on the project. The qualification team then assigned a number against each prospective participant who then qualified, in chronological order, if a place became available (due to cancelled order or survey not approved.)

Upon reaching the agreed target of approved applications the reserve list was closed, with this information being updated on the EN website.

<u>Completion of the qualification process</u>: During April DriveElectric completed the recruitment of 678 participants. The EN website was updated to inform new enquiring participants. Figure 2 below shows the final version of the qualification processes. The questions are asked to each participant to ensure they qualify and understand the projects aims and requirements. If a participant passes this stage, they are then assigned to an installer to begin processing their charger order.



INNOVATION

Electric Nation Q	ualification					
Qualification					Expression of inte	rest
In WPD licence area	×				Date sent	~
Does customer have EV?		~				
Is your vehicle acompany	/ car? 🗌 🔽 🔽	Delivery date of your			EOI date received	~
Vehicle make	~	vehicle / or company car	~	·	Elec Bill date received	~
Vehicle model	~	EN charging power	 ✓ kw 		Target install date	~
Fuel type	~	EN battery size	✓ kWh		Vehicle with Drive Electric	
Existing charger		\sim			Drive Electric Marketing Perm	ission
Off street parking	~			1	Drive Electric Harkeding Fern	
Broadband	~	Homeowne r	~	Prioirty Cus	tomers	
Trial requirements confi	rmedto customer					^
Possible penalty £150	~					
Survey Questionnaire	V Mention	ed IMPACT			ale states	
Арр	V Platform			Fleetdrive A	ction	
Telematics (not collecting	location)	~				^
Charger is untethered (cha	rger cable required)		~			~

Figure 2 – final version of the qualification process screen from ACT CRM database.

Marketing Phase 3

3.1 Website

The EN website was updated during April to inform enquiring prospective participants that applications have been closed due to reaching the target of recruiting 700 participants. Subsequently the EN web application form has also been closed so enquiring prospective participants are unable to apply. Figure 3 below shows this update on the EN website home page.

Out of the 678 approved applications, the EN website produced 7% of these leads (47) thus demonstrating the importance of a project utilising a website for marketing purposes. Furthermore, out of the total number of leads received by the project (3157), the EN web lead produced 10% of leads (317).

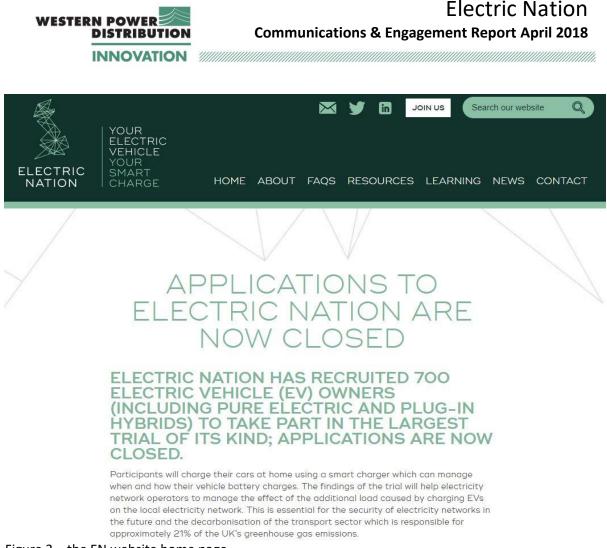


Figure 3 – the EN website home page.

3.2 Event Days

As DriveElectric recruited the targeted 700 participants, no event days to boost customer engagement were required.

3.3 Overview of lead sources

All marketing sources remain in-active due to DriveElectric reaching the project target of recruiting 700 participants. In total the EN project has produced 3157 leads. Unsurprisingly, the lead source of 'Google' search engine has produced the largest figure with 29% of leads (906), with 'EN web lead' and 'Friends recommendation' producing 10% (317) and 6% (199) respectively.

3.4 Social Media

In relation to recruitment, Social media is no longer utilised by DriveElectric due to the completion of recruiting the 700 participants target. However, DriveElectric does utilise



Social media as a method for communicating and engaging to participants, if mentioned on Facebook or Twitter. DriveElectric will continue to have a presence on social media for the duration of the project and responded to all participants, if a query is raised, as this provides a positive customer experience.

3.5 AdWords

All the AdWords campaigns across the WPD distribution area remain inactive. This will not be activated again due to completion of the approved applications target.

3.6 Customer Newsletter

DriveElectric distributes newsletters too all EN participants who gave permission on the initial qualification call. This includes information regarding project updates and technical help such as ensuring the charger and communication kit is always switched on. This helps to engage the participant as the project develops.

This quarter no project updates have been sent to EN participants – the next scheduled update is to be sent is week commencing 30/04. DriveElectric will report on this in the next report.

4 Installation Process

The installers have completed 639 installations with the final 39 booked in for install or awaiting delivery of the charge point from the manufacture. This totaling 678 approved applications which has been approved by the project partners as the final figure for participants on the EN project.

DriveElectric anticipate installation to be completed by mid-May 2018.

4.1 Self-Survey Process

The self-survey process remains unchanged this quarter. With all applications approved, the self-survey process has been completed so will not be updated further.

The following outlines the process of the self-survey:

- 1) DriveElectric assign an installer to the participant then emails them the survey, along with full instructions and the Dropbox link to upload the survey into.
- 2) Customer completes survey, uploads it, and the requested photos, into Dropbox (secure page to store customers data), and returns email confirming this has been completed.

INNOVATION

- 3) Installer reviews information in the Dropbox, either approves or places application in query.
- 4) Approved application– DriveElectric to send participant agreement.
- 5) In query application participant informed of missing information/additional work required, with the participant to action this and confirm once completed.
- 6) Installer then completes an approval run when missing information returned/additional work completed. Step 5 repeated until survey approved or cancelled by the installer.
- 7) Participant returns signed agreement; purchase order is then issued to the installer.
- 8) Installer schedules the installation day with the participant upon receiving the charge point.
- 9) Order complete.

WESTERN POWER

DISTRIBUTION

The self-survey process remains challenging for the installer at times due to participants missing out certain sections of the self-survey. For example, customers do not upload their bonding photos this therefore requires additional conversations with the participant to retrieve the desired information which causes delays. DriveElectric support the installers by sending out, via the CRM system, charger order updates which details the next/outstanding action for the participants.



4.2 Order Process

Electric Nation Charger Update

Thank you for participating in the Electric Nation project.

This is **NOT** an automated message. It is suggested to reply to this email if you have a query of the 'Next Action/Update' in order to progress your application.

Please note details below of your order and check details are correct; if not please respond by way of reply to this email to amend:

Next Action /Update	
Participant Number	
Vehicle Description	
Installer Contact Details	
Control System	
Charger Type	
Is your vehicle a company car	
Mobile phone app	
Vehicle telematics	
Telematics fitted?	
Special Install Instructions	

Survey status: (sent, received,	
in query, site survey required,	
OWL device required)	
Agreement status: (sent,	
returned)	
Install status: (PO sent to	
installer, install date booked,	
Installation complete)	
Estimated Install Date	Please note the date for installation
	is an estimate until date below is
	confirmed.
Confirmed Install Date	

Figure 4 – charger process update template.

There have been no updates to the order process this quarter. Order updates continue to be circulated to all participants 'in process' when an update of their order has been received, as shown below in figure 4. Updates are provided to inform the participant their application is in query or to confirm the installation date. Updates are sent via DriveElectric's CRM database. This has proven a useful tool to keep a participant's application moving to the approval stage by reminding them they need to return their missing information or contact their installer directly.

The update contains information of their contact details, EV's make/model, charger preference and installation date. It has proven useful in confirming this information is correct before their installation date. These updates have highlighted mis-scheduled installation dates, charger preferences and vehicle details so has been vital in streamlining the customers overall experience. Furthermore, the email provides a clear 'next action/update' status so the participant is clear on what is required of them. These updates



can be sent at any stage of the order process thus proving a useful time saving tool for the installer and the EN support team.

DriveElectric continue to update customers on their application status if they enquire; however, it is suggested to the participants to contact their installer directly for the most efficient response.

5 Customer Management

5.1 Complaint/positive feedback

Process/Stage		TNI NO.			[
Process	Irive Sales Process 🧹	EN No		Open Da	te 24/10/2017	~
Stage	New	PIVDCS		Source		~
		Installer		Logged	by Adam Langford	d
Complaint cat			~	Record	Manager Adam Langford	± _
Details				~		
				Review	date	~
	-			Days Op	Den 182	
Advice given				Close D	ate	~
Future				Assoc	🖃 Contacts	0
communication with customer					<	>

Figure 5 – DriveElectric complaint logging process.

Complaints and instances of customer dissatisfaction continue to be recorded under rigorous standard required for businesses regulated by the Financial Conduct Authority. DriveElectric continues to utilise the above process with the CRM database to record, monitor and manage the complaint through to resolution. All complaints are logged and managed by Vicky Reed, head of customer engagement.

DriveElectric received 5 complaints since the previous update: 2 for demand management issues, 1 due to loss of communication on their charger this reducing their charging rate to 16A, 1 due to customer unware they had to purchase the cable and subsequently wished to leave the project and the final for charger supply issues.

Out of the 2 demand management complaints, 1 customer was confused on the behavior of the charger and did not understand this was part of the project – a member of the EN technical team spoke to them to confirm this was usual behavior. The second demand management complaint appeared to be a genuine charging fault – this customer was removed from demand management and the issue raised with the charge point manager, Greenflux.

The participant that lost comms thus reducing the charging rate to 16A advised that this issue would be raised with Greenflux to investigate. Comms to the unit was subsequently restored increase the charging rate to 32A.

The complaint of needing to purchase the cable was raised directly with Mark Dale of WPD who advised the participant would have to pay to leave the project and return the charger and communication kit – the participant decided to remain in the project.

The final complaint was reported directly to WPD. The issue was the delay in re-fitting the charger which was previously removed due to hardware fault. The charger was misplaced by the manufacture, therefore the installer utilised a reserve charger they had in stock to resolve the complaint. All details and actions of this customers order process are to be passed to WPD for their internal records.

Positive feedback is also recorded within the complaint log (figure 5). This quarter 8 positive responses from participants have been received, all attributed to the high-quality service they received from the installer EV Charging Solutions. This quarter 7 participants specifically identified the onsite installer 'Shahz', praising his workmanship and his manners as exceptional.

DriveElectric will continue to record complaints, signs of dissatisfaction and positive feedback until the end of the project in December 2018.

5.2 Customer support line

WESTERN POWER

DISTRIBUTION

The customer support line remains to be the contact for all EN participants to communication with the EN support team; contact details for the support line are placed on the front of each charger upon installation. The support line offers 24/7 fault reporting with faults logged with the DriveElectric team during office hours and an external recording company for out of office hours. The out of office hours messages are instantly forwarded to the EN team, then if an urgent fault requires action DriveElectric can respond to the participant with the next steps.

All faults logged are assigned a priority-based time frame in which the fault is required to be resolved: high, medium and low priority faults. High priority faults are assigned to a charge point when it is failing to charge the participants vehicle – these faults are instantly passed over to the EN technical fault team to diagnose and action the fault resolution processes immediately. Medium priority is assigned when a charge point loses communications – although this does not affect the participants ability to charge on the Crowd Charge system, this is required to be fixed quickly to ensure the charger can enter demand management. However, on the Greenflux system, this reduces the charging rate to 16A so is assigned high priority to action immediately as it directly affects the participants ability to charge. Finally, low priority is assigned when there is an enquiry or low-level fault, such as web portal/app request.



To the Electric Nation teams' knowledge, no participants reported their vehicle was left without charger this quarter – subsequently no participants required a taxi to complete their journey.

6 Fault logging and management processes

6.1 Fault recording process

All reported faults, and enquires, are logged within DriveElectric's CRM database. This allows each fault to be managed and assigned to the relevant team for fault resolution while also monitoring the progress of the fault (figure 9). When the fault is fixed, if possible, the learning is re-used and communicated to the installers or communications team to reduce the possibility of the fault re-occurring. This learning is entered into DriveElectric's weekly long-term fixes fault report (figure 8), which is then distributed to the relevant party if the learning is applicable.

Since the creation of fault reporting and monitoring within DriveElectrics CRM database, 1150 faults and enquires have been recorded. Figure 6 below shows the allocation of the total faults to each fault category. Communication faults have been the largest category to date with 52% of the total received, with hardware and configuration producing 12% and 10% respectively.

Fault category	Faults recorded 🚽	Variance % 🔽
Charger Lead	1	0.09
(blank)	1	0.09
ICU Charger	3	0.26
APT Charger	4	0.35
Other	5	0.43
Vehicle	5	0.43
Communication system	9	0.78
Арр	18	3 1.57
Admin	26	5 2.26
Enquiries	44	3.83
Electrical	67	7 5.83
Behavioural	97	8.43
Configuration	120	10.43
Hardware	148	3 12.87
Comms	602	2 52.35
Grand Total	1150	100.00

Figure 6 – DriveElectric total faults assignments.

Communication faults are mainly recognised by the DriveElectric fault team. A fault is then created to assign to the relevant resolution team and to monitor through to resolution. However, hardware and configuration faults are mainly recognised by the participant and



INNOVATION

recorded upon receiving the call or email. Greenflux communication faults are managed remotely, then DriveElectric contacts the customer to attempt to rectify the fault. CrowdCharge communication faults are managed by the Tech Factory who analyse, diagnose and resolve. DriveElectric request permission, from the participant, for the Tech Factory to contact them directly to resolve the fault.

Faults which are not resolved within a 14-day period are created on an exception report each month for EA Technology, WPD and TRL to track the progress of and discuss at monthly project meetings if required (Figure 7).

			R	EPOR	TED	MON	THL	PE	RIOD												April			
				D	ATE	S OF	REVII	W:								• 08/03/18 TO 05/04/18								
]										
7	-							Fau	lts										T	ckets				
				rowd Ch	arge	Î		-		-	Greenflu	x		7. T	Total	Cro	owd Cha	rge		G	reenflux	<u> </u>	Total	Grand Total
	App	Comms	Communication system	Configuration	Electrical	Hardware	Sub-Total	App	Comms	Communication system	Configuration	Electrical	Hardware	Sub-Total		Admin	Behavioural	Enquiries	Sub-lotal	Admin Behavioural	Enquiries	Sub-Total		
New faults in month	2	49	1	2		8	61	1	8		2	3	9	23	84	1	2	2	5	1		1	e	5 90
Closed faults in month		63		3	2	5	73	1	3		2	2	6	14	87	2	1		3			0	3	90
In month change	2	-14	0	-1	-2	3	-12	0	5	0	0	1	3	9	-3	-1	1	2	2	0 1	0	1	3	3 0
New faults opened last month	1	60		2	3	9	75	2	5	1	10	3	5	26	101	2	2	2	6	7	1	8	14	1 115
Faults closed last month		36		1	1	7	45	1	6		10	4	4	25	70	2	1	2	3	6	2	8	11	L 81
Last month change	1	24	0	1	2	2	30	1	-1	1	0	-1	1	1	31	0	1	2	3	0 1	-1	0	з	34 34
Faults reported to date	6	454	3	33	27	70	593	6	112	2	396	34	82	632	1225	19	55	27 1	01	6 46	16	68	169	1394
Faults closed to date		384	3	31	26	57	501	5	91	1	340	29	73	539	1040	19	52		71	5 39	7	51	122	1162
Faults presently open	6	70	0	2	1	13	92	1	21	1	56	5	9	93	185	0	3	27	30	1 7	9	17	47	7 232
																								2
Avg time to fully resolve faults to	date																	-	10- 					
<1 day		39	1	2	4	6	52	3	12	1	114		10	140	192	6	14		20	1 9	4	14	34	1 226
1 to 3 days		71	027 03	2	2	6	81		11		21	2	10	44		4	7		11	2 8	2	12	23	
4 to 7 days		30	1	4	2	12	49	1	3		8	3	10	25	74	2	12		14	4		4	18	92
8 to 14 days		38	1		3	10	52	1	5		5	3	7	21		1	4	2	7	4		4	11	
>14 days		206		20	16	23	265		60		192	21	35	308	573	6	15		21	2 15	1	18	39	612

Figure 7 – DriveElectric monthly fault report, 08/13/18 to 05/04/18.

LONG TERM FIXES

LONG TERIVI FIXES			
General	Action	Actionee	Complete
Restore comms to units by sending out	TTF send out second batch of	TTF	No
recievers and repeaters to customer	recievers to garner conclusive		
	results		
Crowd Charge / APT	Action	Actionee	Complete
	EA to discuss with the Tech		
CC have proposed testing on the controller	Factory and Chirs Jones at		
so that the comms system resets itself if it	Crowd Charge to setup a test		
falls offline	rig	EA Tech TTF and Crowd	No
Greenflux / ICU	Action	Actionee	Complete
Chargers 216-318 are configured incorrectly so they don't auto detect between broadband and Sim for comms	Siemens to attend and restore comms bridge if required and manually upload config		No
Charging points fallen offline in areas with poor GSM	Siemens to attend and feed back if wifi solution can't bring the chargers online	Siemens	No

Figure 8 – DriveElectrics long term fixes for April.



Long Term Fix (Add ~

<

Charging FAULT Process/Stage Open Date 24/10/2017 EN No Vehicle Make V Process xEN_Fault ~ Source Fault No Vehicle Model Stage Open ~ Loggedby Adam Langford Charge point ID PIVDCS **Review date** ~ Priority Installer Charger Model Owner Issue Cat **Record Manager** Adam Langford -~ Fault Group Details Days Open 185 Final fix **Close Date** V E Contacts 0 Assoc

Figure 9 – DriveElectric's fault logging/management process.

7 Learning reference communications process

Throughout the project DriveElectric continue to assess, analysis and update processes with the aim to enhance the customers overall experience on the project. Furthermore, DriveElectric review processes based on feedback from participants as this can be the most valuable. All learning points and process updates are detailed within the Communication and Engagement reports and the TRL learning log.

This quarter positive learning points have also been added to the learning log, in relation to recruitment and installation processes. It is important that all project partners, and especially DriveElectric, record not only processes that would be done differently, but also process that have worked effectively and contributed to the success of the project.

As DriveElectric completed the target of recruiting 700 participants, various process and strategies must have contributed to this success. For example, the qualification process was streamlined upon the initial qualification call so that it identified any issues earlier on in the process to prevent it from taking up the installers time further along the process. The qualification team checked that the house was owned by the participants or if it was rented, as rented accommodation meant that permission was required from the landlord which slowed the approval process. This learning has been entered in the learning log for future WPD projects.