DIGITALEUROPE

Revision of Lot 7 External Power Supplies Regulation

Brussels, 16 June 2015

DIGITALEUROPE welcomes the opportunity to provide comments on the draft working document for external power supplies (EPS).

Summary

DIGITALEUROPE reiterates its previous position from the joint industry letter of 21 November 2013. We believe that currently a single-tier regulation harmonised with the US DOE is appropriate, and suggest that Tier 2 be addressed at a later stage, based on additional analysis.

We maintain this position for the following reasons:

- This is a key opportunity for global harmonisation, leading to a more efficient and effective way for global companies to manage compliance;
- We do not believe that the data analysis used by the consultants used to justify a second tier yields the 40% savings potential claimed by the consultants. DIGITALEUROPE's calculations show that the proposed tier 2 reduces power supply losses by a maximum of 11% compared to tier 1. Although DIGITALEUROPE has discussed this with the consultants, we were unable to understand their justification as the consultants were unwilling to share the assumptions of their model. We would very much like to collaborate with the consultants about this fundamental difference in data analysis.
- With only a year and a half for between the two tiers, implementation of the proposed two-tier regulation would require significant design changes and recertification, resulting in greatly increased costs, As this point may not have been fully appreciated, we provide further detail in this paper.
- We question the notion of an automatic alignment with the EU Code of Conduct (CoC). There has been limited stakeholder engagement and consultation in the development of the EU CoC, leading DIGITALEUROPE to question if this is a representative and appropriate basis for regulation.
- DIGITALEUROPE has also taken this opportunity to make comments on the following:
    - the 10% loading efficiency requirement;
    - to request that spare parts be excluded in accordance with the 'repair as produced principle'(as per the RoHS and ELV Directives) rather than limiting the exemption to a fixed number of years;
    - information requirements for websites;
    - the mark-up for additional costs; and,
    - an error identified in the measurements section of the draft regulation.

1) Harmonisation with US DOE

The limited energy savings to be realised from the proposed tier 2 limits justifies a delay in implementation in order to support global regulation. The impact of eliminating tier 2 for industry will decrease costs, reduce design complexity, eliminate unnecessary administrative overheads, and allow smaller inventories to support a globally aligned marketplace. Ultimately this will benefit the end user through a cheaper product and the

environment through a reduction in the use of critical raw materials. The proposed revision to the EU regulation provides an opportunity to advance a globally harmonised approach to future regulation.

2) Justification for Tier 2: Data Analysis

DIGITALEUROPE would like to work with the consultant on the forthcoming modelling work underlying the impact assessment and the implementing measure. As the consultant's underlying calculations were not shared with industry, we are currently not able to support the consultant's conclusions.

Our understanding is that the justification for a two-tier regulation is based on a proposed 40% saving from tier 2. Because we are unable to understand how this apparent 40% saving has been calculated, DIGITALEUROPE also cannot understand the rationale for having two tiers. The assumptions that have been employed for the usage patterns are not clear, yet it is understood that these assumptions are significant for justifying the return on investment.

DIGITALEUROPE's energy evaluation (which is detailed further in Annex I of this document) based on the data provide by Fraunhofer study "energy consumption of Consumer Electronic in US home 2013"demonstrates that the energy saving ratio brought about by the CoC V5 tier 3 should be not more than:

- **8.2%** for the period 01/01/2017- 31/12/2021.
- **9.5%** for the period 01/01/2017-31/12/2022.
- **11**% for the period 01/01/2017- 31/12/2030

3) Tier 2 Redesign and Recertification Costs

The current assumption of the "anonymous supplier" referenced in the consultant's work is that there will be no significant cost difference between an EPS compliant with the EU CoC and an EPS compliant with the DOE regulation.

DIGITALEUROPE has consulted its members and found that there are significant costs involved with implementing the EU second tier, as follows:

- A large proportion of devices supplied with an EPS will have to be re-certified with a CoC V5 compliant EPS model. For example for product categories which have a 3-year commercial lifetime, 50 % of models will have to be certified; for products having a 4-year lifetime, 62.5% will have to be certified. This because an EPS tier cannot be anticipated for more than one year for legal / technical / sourcing or business reasons.
- CE re-certification of each existing models will not bring any benefit for the industry globally, as the scope of CoC V5 tier 2 specification is limited to the EU.
- CE certification is very costly depending on the complexity of each product. CE re-certification costs are never less than 80% of initial certification cost. For example, it costs about 5000 € for a very simple Gateway without WiFi or a basic Complex SetTop Box (zapper). A second example is that it

costs about 35 000€ for DSL or Cable Gateway with concurrent WiFi 2.4GHz and 5GHz, four Gb Ethernet port, VoIP ports.

- Any EPS change may impact EMC and safety performance, and consequently require a partial redesign in order to comply. When equipment design is updated, it requires re-certification with all other EPSs required in order to be compliant in the global market.

- In order to cover the global market, the manufacturer must CE certify each device at least with two EPSs: one compliant to DOE only and the second compliant to DOE and CoC V5 EPS.

4) Concerns with Alignment with EU CoC

- EU CoC EPS V5 is not an internationally recognized standard outside EU.
- EU CoC has had minimal stakeholder engagement and is currently endorsed by only four industry proponents.
- Industry calculates that the cost of an EPS compliant to CoC tier 2 EPS CoC EPS V5 tier 2 will be significantly higher and not equivalent to the costs proposed by DOE.
- The over-cost of an EPS compliant to CoC V5 tier 1 (but not compliant to DOE) is at this date (2015) around 0.12€ for 12W and 18W EPS. We therefore cannot understand why and how an EPS with 1% greater energy efficiency than a DOE compliant model will be at the same price of a DOE compliant EPS.

5) 10% Loading Efficiency Information Requirement

DIGITALEUROPE disagrees with the concept of a horizontal information requirement covering all EPSs. For the vast majority of EPSs there is no use-case scenario in which the EPS will use 10% of the load.

- The 10% efficiency load requirement is based on the EU Code of Conduct. During the development of the CoC there was considerable dissent on the subject of 10% load, that is, that the 10% load will have no effect for a product spending 99% if its life at other power levels. Please refer to supplementary information provided in Annex 1.

- The additional assessment report of the EPS review of March 2014 indicates there are significant differences in efficiency at a 10% loading level, ranging from 1 to 40% in the low load range. The improvement potential for the vast majority of the products is only a theoretical improvement, which does not occur in real life. Efficiency testing of EPSs using standard EN 50563; 2011 is done not with a product but with a resistive load, which can either be a variable resistor, electronic test load or a combination. Test conditions do not represent actual use cases when an EPS is connected to a product. In practice, the vast majority of EPSs do not have a use case at 10% loading level, or at the best, only operate at 10% loading level for a very short time.

- In order to set a 10% load information requirement, a distinction would need to be made between EPSs used for products with a battery included versus products where the EPS is used to supply power directly to the product. For products without batteries, an information requirement at a low level might make sense to ensure efficiency at lower levels.

- For EPSs used with batteries, e.g. shavers, mobile phones and tablets, the 10% loading efficiency requirement has no added value. After the charging cycle has ended, the EPS will switch off or switch

to a very low power level. The shut-off moment is determined by: battery chemistry; risk of overcharging; required battery tolerances; electronics system design; battery & service life; and, safety concerns. Over average, the shut off ranges from around 7% to 30%[1]

- In Annex II, we provide further information on typical charging characteristics for a battery. It shows that the time that the battery is in 10% load is not present, or only at the end of the cycle and negligible.

- For those cases where the EPS and battery charged product do operate for a negligible time at 10% load, the administrative and testing burden outweighs any theoretical saving potential.
- Additionally the costs for measurement etc. of a product family could easily amount to >2,500 euro. With multiple families on the market and no added value we consider this an inefficient use of resources.

6) Spare Parts

DIGITALEUROPE requests that spare parts be excluded in accordance with the 'repair as produced principle' (as per RoHS[2] and ELV[3] Directives) instead of limiting the exemption to a fixed number of years.

DIGITALEUROPE requests alignment of regulatory principles across European regulations, having put forward the same request under the revision of the fans regulation (327/2011). This is essential to facilitate compliance, market surveillance, and the circular economy.

The availability of spare parts guarantees longer product lifetimes and prevents waste, core elements of the EU's resource efficiency policy and the EU waste hierarchy. The RoHS Directive, which also covers EPSs, foresees an exclusions for spare parts used for the service, maintenance, and repair of products already placed on the market before the entry into force of the substance restrictions. These derogations are the "repair as produced" principle and allow the prolongation of product lifetimes without manufactures or users having to carry any additional costs due to re-designing, re-testing, re-manufacturing.

Q1.3 of the COM RoHS2 FAQ document states that: "Cables, spare parts for the repair, the reuse, the updating of functionalities or upgrading of capacity for a specific product category, must comply from the same date as their respective product category. Following the principle of 'repair as produced', spare parts for the specific products already on the market before the dates mentioned above are exempted".

7) Information to be provided by manufacturers on websites

1 Sources: http://powerelectronics.com/mobile/battery-charger-adapts-multiple-chemistries and http://batteryuniversity.com/learn/article/charging_lithium_ion_batteries

2 Recital 12 of Directive 2002/95/EC, later taken over in Recital 20 of Directive 2011/65/EU: As product reuse, refurbishment and extension of lifetime are beneficial, spare parts need to be available.

3 Recital 2 of COM Decision 2005/438/EC amending Annex II to Directive 2000/53/EC: As product reuse, refurbishment and extension of lifetime are beneficial, spare parts need to be available for the repair of vehicles which were already put on the market on 1 July 2003.

DIGITALEUROPE questions the logic behind providing the proposed information on free-access websites, as this is increasingly an unnecessary burden with no obvious added value. We respectfully request another solution be provided to list this information on the safety instruction or user-guide.

8) Mark up for additional costs

DIGITAL EUROPE believes that the cost mark-up for changes made to the original product is incorrect. It is far too conservative. The excel file shared with industry on June 9th requesting further data lists the mark-up for retail and wholesale as a 10% margin, based on an earlier estimate from the impact assessment for electric motors.

We would like to point out that independent data from Butler Consultants provides a breakdown of cost components for the revenues of businesses, including the expenses related to the revenue, gross margin and average net profit for 47 generic industries including equipment manufacturers, wholesale trade and electronics store.

According to this data, the average gross margin for an equipment manufacturer is 31,98%, a wholesale trader is 22,70%, and an electronics store is 30,76%.

The table below shows that the initial manufacturing cost price of € 68,02 results in a retail selling price of 173,79 euro, which represents a cost mark up of 256%. This confirms our earlier statement that a mark-up of maximum 2 is too conservative and a mark-up of 2,5 is a more realistic for use in average calculations.

		Butler consultants
Equipment manufacturer	cost price manufacturer (68,02%)	€ 68,02
	margin manufacturer (31,98%)	€ 31,98
	revenue (=selling price) manufacturer (100%)	€ 100,00
Wholesale trade	buying price wholesale (77,3%)	€ 100,00
	margin wholesale (22,70%)	€ 29,37
	revenue (=selling price) wholesale (100%)	€ 129,37
Electronics store	buying price retail (69,24%)	€ 129,37
	margin retail (30,76%)	€ 44,43
	revenue (=selling price) retail (100%)	€ 173,79
	multiplying factor (selling price retail/cost price manufacturer)	256%

Table 1; Source: http://research.financial-projections.com/IndustryStats-GrossMargin.shtml

9) Measurements

DIGITALEUROPE would also like to comment on Annex I of the draft regulation, regarding measurements. This contains a mistake, which requires changing, as per information below.

The no-load condition power consumption and the average active efficiency referred to in Point 1 shall be established by a reliable, accurate and reproducible measurement procedure, which takes into account the generally recognised state of the art.

Measurements of power of 0.50 Watt or greater shall be made with an uncertainty of less than or equal to 2% at the 95% confidence level. Measurements of power of less than 0.50 Watt shall be made with an uncertainty of less than or equal to 0.01 Watt at the 95% confidence level.

Research has proven that there is no cost-effective way to reliably measure with the requested accuracy: "Measurements of power of 0.50 Watt or greater shall be made with an uncertainty of less than or equal to 2% at the 95% confidence level. Measurements of power of less than 0.50 Watt shall be made with an uncertainty of less than or equal to 0.01 Watt at the 95% confidence level." This comes from edition 1 of IEC 62301, and was corrected in edition 2. It was also corrected in EN 50564, but not in EN 50563 (because it was not possible to reference an edition of IEC 62301, which was not available yet.

The text should actually read: *"Measurements of power of 1.0 Watt or greater shall be made with an uncertainty of less than or equal to 2% at the 95% confidence level. Measurements of power of less than 1.0 Watt shall be made with an uncertainty of less than or equal to 0.02 Watt at the 95% confidence level."*

DIGITALEUROPE sees this as a critical point and requests that the error is addressed.

Annex I: Details of DIGITALEUROPE'S Tier 2 Energy Savings Calculations

Industry previously analysed savings based on patterns of product use provided by industry experts; recent supply chain data about going from the current Energy Star Level 5 to the DOE level; and, and data which shows that there will be a cost uplift for the end-user and no return of investment.

DIGITALEUROPE disagrees on the time period of 2016 to 2030 used by the consultant for the projected of energy saving calculation. We believe that the period to take in account for such a calculation should be based on the start date of the revision of 278/209 (i.e. 2017) and should end at the start of the following revision of 278/2009. Based on past experience, this would mean a calculation until 2022 and not later than 2024 (7 years).

DIGITALEUROPE energy saving calculation demonstrates that the energy saving ratio between DOE only scenario and DOE + CoC V5 are as follows:

- **8.2%** for 5 year period starting the 01/01/2017 and finishing the 31/12/2021
- **9.5 %** for a 6 years period starting the 01/01/2017 and finishing the 31/12/2022.

However even for the extended period starting 01/01 2017 to 31/12/2030, the energy saving ratio is no more than 11%.

This calculation is based on the document "*ENERGY CONSUMPTION OF CONSUMER ELECTRONICS IN US HOME IN 2013,"*as conducted by Fraunhofer in 2014. The scope of this study was to provide the number of units, power consumption and time in several mode active, sleep, off, etc. for several different products with and without an EPS. Based on this data, the energy consumption impact and energy savings potential of the two scenarios has evaluated to a high degree of probability.

Even if the number of devices per capita typically is different between Europe and the US (e.g. game console 55% in US vs. 45% in EU) the EU device distribution ratio should not be so far from the US scenario, with EU device distribution ration likely converging with the US scenario over time.

To calculate the power saving ratio brought about by the CoC V5 tier 2 over DOE, the following data have been taken into account:

- Eleven device categories having an EPS including smartphone, various type STB/CSTB, various types of networking equipment, game console, average laptop based on various categories of Laptop, average tablet, average smartphone
- This study does no included GSM phone, but simulation have demonstrate that the energy saving ratio bring CoC V5 is reduced (0.1%) if GSM phone are take in account.
- The number of units per category, average use scenario, average power consumption in various device mode (on, idle mode, no load, disconnected from the main, etc) come directly or indirectly (after calculation) from Fraunhofer document. This data will allows to calculate for each product category the yearly power consumption and the yearly difference in power consumption of the 3 scenario: Business as Usual Scenario (278/2009), DOE 2014, and DOE and CoC V5

- The energy efficiency and no load power of EPS are provided by the regulation draft
- Nameplate power output power and product lifetime are based on DE manufacturer experience and knowledge.
- Next revision date of the 278/2009 in order to make the evaluation of energy saving on realistic period of time.

The table 2 details how the overall energy saving ratio is calculated; the table 3 below summarises several simulation results for different periods and 2 different Tier 2 dates.

The table 2 demonstrates that even if CoC V5 suggests a higher energy saving ratio for devices having a high power consumption (laptop and game console), the overall power saving ratio is not more 8.2%

Device		Overall Senario Energy consumption (Kwh)			Energy saving (%) bring by		
Device type name	Number of units per device type	Business as usual (278/2009 (tier 2)	DOE only	DOE+COC EPS V5 tier 2	DOE only over Business as Usual scenario	DOE+CoC V5 tier 2 scenario over Business as Usual scenario	DOE+CoC V5 tier 2 scenario over DOE scenario
1: STB cable (24W)	117 187 500	7.83E+10	7.61E+10	7.59E+10	2.8%	3.0%	7.1%
2: Video Game Console: 135W	128 000 000	4.50E+10	4.47E+10	4.45E+10	0.7%	1.0%	34.3%
3: STB Sattelite: 24W	98 214 286	5.55E+10	5.40E+10	5.38E+10	2.8%	3.0%	7.1%
4: Router: 12W	94 220 339	2.77E+10	2.67E+10	2.67E+10	3.7%	3.8%	2.8%
5: Portable PC / Laptop: 90W	92 452 830	2.66E+10	2.61E+10	2.60E+10	1.6%	2.1%	25.4%
6: IAD/GW:12W	6 403 226	1.97E+09	1.90E+09	1.90E+09	3.7%	3.8%	2.8%
7: STB telco:24W	32 075 472	1.70E+10	1.65E+10	1.65E+10	2.8%	3.0%	7.1%
8: Modem: 12W	49 090 909	1.37E+10	1.32E+10	1.31E+10	3.7%	3.8%	2.8%
9: STB stand alone:12W	55 555 556	1.09E+10	1.05E+10	1.04E+10	4.1%	4.2%	1.4%
10: Smart Phone:10W	166 000 000	1.10E+09	7.28E+08	7.03E+08	33.8%	36.0%	6.2%
11: Tablet: 10W	98 360 656	1.04E+09	8.02E+08	7.87E+08	22.7%	24.2%	6.0%
12: computer speaker without sub woofer: 9.5W	42 000 000	1.36E+10	1.30E+10	1.30E+10	4.5%	4.6%	2.8%
TOTAL all devices type (TWh) for period 2017-2021 (5 years) tier 2 in Jul 2018	**979 560 773**	**2.923E+02**	**2.841E+02**	**2.834E+02**	**2.8%**	**3.0%**	**8.2%**

Table 2

The third table below summarizes several scenarios for purposes of comparison:

Scenario energy saving ratio for different period and tier 2 dates							
Period considered and tier 2 date		Overall Senario Energy consumption (TWh)			Energy saving (%) bring by		
	Number of units per device type	Business as usual (278/2009 tier 2	DOE only	DOE+COC EPS V5 tier 2	DOE only over Business as Usual scenario	DOE+CoC V5 tier 2 scenario over Business as Usual scenario	DOE+CoC V5 tier 2 scenario over DOE scenario
TOTAL all devices type (TWh) for period 2017-2021 (5 years) tier 2 in Jul 2018	979 560 773	2.923E+02	2.841E+02	2.834E+02	2.8%	3.0%	8.2%
TOTAL all devices type (TWh) for period 2017-2022 (6 years) tier 2 in Jul 2018	979 560 773	3.508E+02	3.399E+02	3.387E+02	3.1%	3.4%	9.5%
TOTAL all devices type (TWh) for period 2017-2023 (7 years) tier 2 in Jul 2018	979 560 773	4.092E+02	3.956E+02	3.940E+02	3.3%	3.7%	10.5%
TOTAL all devices type (TWh) for period 2017-2030 (14 years) tier 2 in Jul 2018	979 560 773	4.092E+02	3.992E+02	3.980E+02	2.4%	2.7%	11.0%
TOTAL all devices type (TWh) for period 2017-2022 (6 years) tier 2 in Jan 2019	979 560 773	4.092E+02	3.992E+02	3.980E+02	2.4%	2.7%	11.0%

Table3

DIGITALEUROPE's energy evaluation demonstrates that the energy saving ratio brought about by the CoC V5 tier 3 should be not more than

- 8.2 % for the period 01/01/2017- 31/12/2021 (5 years).
- 9.5% for the period 01/01/2017-31/12/2022 (6 years).
- 10.5% for the period 01/01/2017-31/12/2022 (7 years).
- 11% for the period 01/01/2017- 31/12/2030 (14 years).

In addition this table demonstrate that if the tier 2 is delayed of six month (01/01/2019) to spread the certification workload and cost on a longer period, the overall energy saving impact will be not more than 0.193% of the overall energy consumption during the 2017-2021 period.

Reasons of the low energy savings potential as a result of CoC V5 tier:

- The number of EPS units < 20W represent 60 % of total EPS units (if we include in addition the EPS mobile phone)
- The energy efficiency does not change for EPS over 49W, meaning for example that a laptop with a 90W EPS and laptop with a 200W EPS have the same power consumption;

- For EPS<20W, the additional energy efficiency ratio brought about by CoC V5 tier 2 is a very small percentage of the energy efficiency improvement over DOE requirements:

Name plate Output Power	Energy saving in % bring by DOE over current 278/2009	Additional % of DOE energy energy saving bring by CoC V5 tier 2
5W	6.9 % or 0.35W	2.27% or 0.01W
10W	6.4% or 0.64W	4.55% or 0.03W
20W	5.1% or 1.03W	10.21% or 0.11W
30W	3.8% or 1.15W	18.42% or 0.21W
40W	2.5% or 0.98W	31.7% or 0,31W

Table 4

- The no load power has a very small impact on the power consumption:
    - For a smart phone with a DOE compliant EPS, the yearly energy consumption in on-mode is 5.03kWh that is, the yearly no-load energy consumption is 0.56KW and represent only 10% of the total energy consumption and the difference between DOE and CoC V5 No load power (0.025W) bring 3% of improvement but is not visible in the overall power consumption of all device types an number.
    - The yearly energy consumption difference between DOE EPS and COC V5 EPS assumed to be in no-load 24/24 is no more than 0.11kWh.

Conclusion:

DIGITAL EUROPE cannot scientifically replicate the consultant's claim of 40% energy savings because:

- The distribution of EPS nameplate output powers shows that 60% of EPS have a max output power nameplate <20W. For these EPS < 20W the energy saving gains by CoC V5 tier 2 is only 10.2% of the energy saving gains by DOE limits.
- The end of the evaluation period to be considered is the application date of the next revision. This means that the evaluation period is somewhere between 01/01/2021 and 01/01/2023.
- An even if the period considerate is 2017- 2030 the energy saving ratio is not more than 11%.

Annex II: 10% Loading Efficiency Information Requirement

The 10% efficiency load requirement is based on the EU Code of Conduct. During the development of the CoC there was considerable dissent on the subject of 10% load. The minutes of the meeting of the working group (September 13th 2012) contains the following summary of the discussion and statement that an increased efficiency at 10% load will have no effect for a product spending 99% if its life at other power levels:

> "The separate target for efficiency at 10 % load was discussed. According to investigations from telecom operators ever more (external) power supplies for ICT products will work at the 10-30% load range. Also the proposed targets for LoNA products (Tier 1: 6 W, Tier 2: 3 W) in the networked standby amendment suggest that these products will be in this load range when in networked standby. However a target at this load level is not useful for external power supplies for mobile phones which either charge the battery (at full load) or are unplugged or in no load condition. Other participants want to check their products before giving an opinion. Mr. Bertoldi asked them to provide data before the end of November 2012. One STB manufacturer indicated the following. To be efficient, the choice of the additional limit should be tailored to the application. Example: an increased efficiency at 10% will have no effect for a product spending 99% of its life at other power levels. While it would make sense to specify minimum efficiency limits at power levels corresponding to existing and coming regulations (0.5W, 3W, 12W…) such as 1275/2008 and especially networked standby, where networked products would spend most of their time, the choice of 10% is to be checked"
>
> (http://iet.jrc.ec.europa.eu/energyefficiency/efficiency-external-power-supplies-meetings)

For the vast majority of the battery charged product there is not use case scenario that could support setting a requirement on the 10% efficiency load. Either the EPS terminates already before the 10% load is reached, or the time spend in 10% load is negligible compared to the overall active time.

- The figures below show two typical charging characteristics for a battery.
  - The first figure shows the charging and load graph for a 4.2V, 885mA Li-Ion battery with a shut off at 60mA (7%). The battery is charged for 3 hours until the voltage reaches 4.2V. After that the voltage remains constant at 4.2V and the current starts to decrease until the moment charging will be terminated. In this case the shut off moment is at 60/885mA = 7%, but the time the battery is in 10% load is only at the end of the loading cycle and negligible.

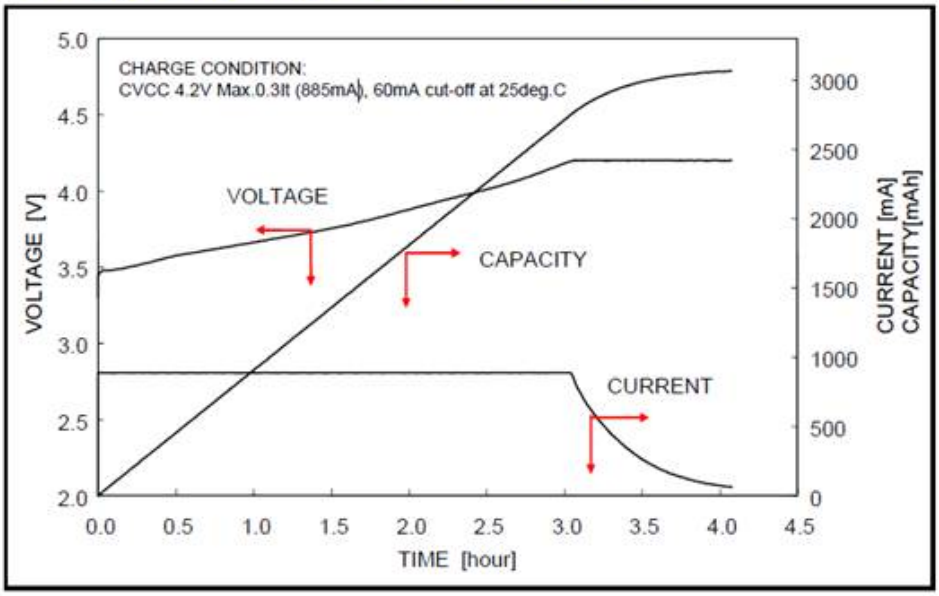

Table 5

The second figure shows the charging cycle for Li-Ion battery with a charge termination at 20% of the current. In this case there is not even a use case at 10% load. (source: http://powerelectronics.com/site-files/powerelectronics.com/files/archive/powerelectronics.com/portable_power_management/battery_charger_ics/807PET22-battery-charger-Figure01.jpg)

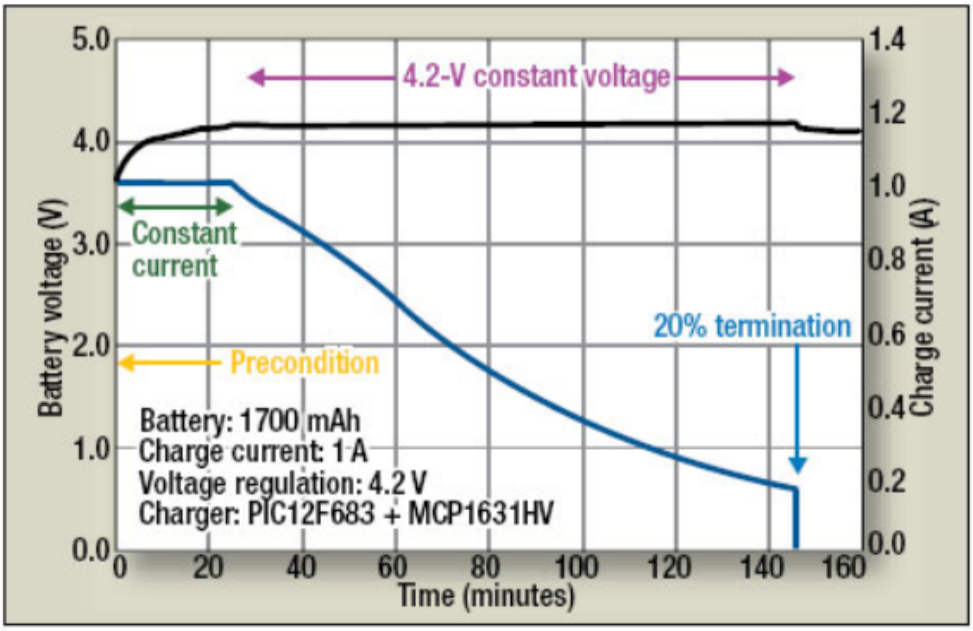

Table 6

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ABOUT DIGITALEUROPE

DIGITALEUROPE represents the digital technology industry in Europe. Our members include some of the world's largest IT, telecoms and consumer electronics companies and national associations from every part of Europe. DIGITALEUROPE wants European businesses and citizens to benefit fully from digital technologies and for Europe to grow, attract and sustain the world's best digital technology companies.

DIGITALEUROPE ensures industry participation in the development and implementation of EU policies. DIGITALEUROPE's members include 58 corporate members and 36 national trade associations from across Europe. Our website provides further information on our recent news and activities: http://www.digitaleurope.org

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