

# Declaration of the HAR Group on the conversion of HD 21 and HD 22 standards to EN 50525 series standards

## HAR Scheme Processes and Procedures

This declaration is addressed to cable manufacturers, traders and end users of cable, and to HAR scheme members. Its purpose is to explain the conversion process from harmonisation documents (HDs) to fully harmonised European standards (ENs), and the procedures that the HAR scheme has adopted to provide continuity of product certification throughout this period.

### Background

The European electrotechnical standardisation organisation CENELEC has published a number of Harmonisation Documents (HDs) over the last 20 years, as the first step in the full harmonisation across Europe of many types of electric cables. Supporting standards, in the form of materials specifications and test methods, have now been published as European standards. In 2006 CENELEC began the process of conversion of HD 21 and HD 22, and these are shortly to be published as the EN 50525 series of standards. The requirements set out in HDs 21 and 22 have been published as national standards in each CENELEC region country, sometimes with variation of presentation. With the new EN 50525 series the standards will be directly published as national standards in many cases they will need to be translated into local languages before publication by the national standards body.

The HAR scheme is a voluntary product certification scheme incorporating mutual recognition of certificates, operating in most countries of the CENELEC region. It was established by accredited electrotechnical certification bodies specialising in cables, in close co-operation with cable manufacturers. Most manufacturers located in these countries, making cables to HD 21 and HD 22, hold certification licenses from HAR Scheme member Certification Bodies (CBs). As a result of the publication of the EN 50525 series and the subsequent withdrawal of HD 21 and HD 22, these certifications will need to be converted.

### **Overall Approach**

Existing licenses based on the HDs will continue to be valid until the date of withdrawal (DOW), and new, separate, licenses will be issued covering the new standards. Hence two licenses, covering the same cable, will run in parallel until the DOW. Manufacturers and the market will be educated about the changes during the transition period. A new edition of the list of cables under the HAR Scheme (PD-7), with cross references between HDs and ENs, has been published.

### Timeline

The new EN 50525 series of product standards was ratified by CENELEC on 17 January 2011; the latest date of national publication (DOP) has been set as 17 January 2012, and the latest date of withdrawal of national publications set as 17 January 2014 (DOW). The effective date of

withdrawal of HD 21 and HD 22 is therefore 17 January 2014.

National standards bodies may publish their national implementation of the EN 50525 series at any time after the DOP. Likewise, the withdrawal of conflicting national standards based on the HDs may take place before the DOW. In many cases this will be influenced by the progress of translations. However, these national implementation / withdrawal dates will not affect the timing of HAR scheme licensing activities, which are driven by the DOP and DOW.

New HAR scheme licenses based on the new EN 50525 series standards may be issued at any time after the DOP.

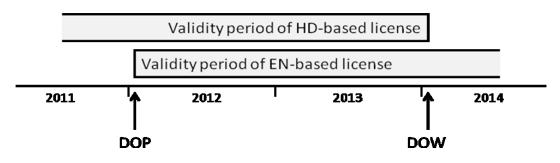
### **Technical Changes**

The opportunity has been taken in the publication of the EN 50525 series of standards to update references, and in a small number of cases there are some changes to specifications and test methods. In most cases there are no changes. CENELEC Harmonised Code Designations (see HD 361 S3/A1, July 2006) for the cables will remain the same in the majority of cases. A small number of little-used cables types have been removed.

### Validity

- 1. Licenses making reference to HD 21 or HD 22 will remain valid and shall remain acceptable to all HAR member CBs until the DOW, unless withdrawn or surrendered prior to this date.
- 2. New licenses making reference to the EN 50525 series will be valid from the DOP and shall be acceptable to all HAR member CBs from date of issue.

The market will be encouraged to accept either type of certificate during the transition period.



#### HAR Scheme Procedures and Requirements

- 1. Separate licenses shall be issued making reference to HD 21 or HD 22 and the EN 50525 series standards reference to both 'old' and 'new' standards shall not be made on the same license.
- 2. After the DOP, new or renewed licenses making reference to HD 21 or HD 22 may be issued by HAR scheme member CBs, but the latest expiry date set shall be the DOW.
- 3. New licenses making reference to the EN 50525 series shall not be issued by HAR scheme member CBs until after the DOP.
- 4. HAR member CBs may choose to await translation and publication of the EN 50525 series standards in their local language before issuing such new licenses.

- 5. HAR member CBs shall withdraw all remaining licenses making reference to HD 21 or HD 22 on the DOW (including those cable types withdrawn). It is expected that new licenses making reference to the EN 50525 series shall have been issued well before the DOW.
- 6. If technical changes to cable types have been made in the relevant EN 50525 series standard, such that additional or revised test requirements are necessary, then no new license referring to EN 50525 series standards may be issued until the necessary testing has been undertaken. At the discretion of the HAR scheme member CB, this may be conducted as part of normal surveillance.

Annex – List of Cable Types and New EN 50525 Parts

### LIST OF CABLE TYPES AND NEW EN 50525 PARTS

Ref.	Ref.	Type description	Code Designation	Starting or beginning for updating licences	Deadline for updating licences	Standard	Clause		Harmonization		
(EN)	(HD)						EN	HD	document		
1.	1. LOW VOLTAGE ENERGY CABLES OF RATED VOLTAGES UP TO AND INCLUDING 450/750 V CABLES FOR GENERAL APPLICATIONS										
N01.01	H1.3	Light duty PVC insulated and sheathed cables	H03VV-F H03VVH2-F	2011-05-01	2014-01-17	EN 50525-2-11	4.1	4	HD 21.5 S3 + /A1:1999		
N01.02	H1.4	Ordinary PVC insulated and sheathed flexible cables	H05VV-F H05VVH2-F	2011-05-01	2014-01-17		4.2	5	+ /A2:2001		
N01.03	H1.14	Heat resistant (90°C) light duty PVC insulated and sheathed flexible cables	H03V2V2-F H03V2V2H2-F	2011-05-01	2014-01-17	EN 50525-2-11	5.1	2			
N01.04	H1.15	Heat resistant (90°C) Ordinary duty PVC insulated and sheathed flexible cables	H05V2V2-F H05V2V2H2-F	2011-05-01	2014-01-17		5.2	3	HD 21.12 S1 + /A1:2001		
N01.05	H1.16	Heat resistant (90°C) Ordinary duty PVC insulated and sheathed flexible cables cords with strain bearing member	H05V2V2D3-F	2011-05-01	2014-01-17		5.3	4			
N01.06	H1.11	Light duty PVC insulated and sheathed extensible leads	H03VVH8-F H03VVH2H8-F	2011-05-01	2014-01-17	EN 50525-2-12	4.1	2	HD 21.10 S2		
N01.07	H1.12	Ordinary duty PVC insulated and sheathed extensible leads	H05VVH8-F H05VVH2H8-F	2011-05-01	2014-01-17	EN 50525-2-12	4.2	3	HD 21.10 S2		
N01.08	H2.5	Ordinary duty flexible cables with crosslinked elastomeric insulation and sheath	H05RR-F	2011-05-01	2014-01-17		4.1	3			
N01.09	H2.6	Ordinary duty flexible cables with crosslinked elastomeric insulation and PCP or equivalent sheath	H05RN-F	2011-05-01	2014-01-17	EN 50525-2-21	4.2	4	HD 22.4 S4		

Ref.	Ref.	Type description	Code Designation	Starting or beginning for updating licences	Deadline for	Standard	Clause		Harmonization
(EN)	(HD)				updating licences		EN	HD	document
N01.10	H2.7	Heavy duty flexible cables with crosslinked elastomeric insulation and PCP or equivalent sheath	H07RN-F	2011-05-01	2014-01-17		4.3	5	
N01.11	H2.8	Heavy duty multicore flexible cables with crosslinked elastomeric insulation and PCP or equivalent sheath	H07RN-F	2011-05-01	2014-01-17		4.4	6	
N01.12	H2.18	Heat resistant (90°C) ordinary duty flexible cables, with EPR elastomeric insulation and TPU sheath	H05BQ-F	2011-05-01	2014-01-17	EN 50525-2-21	7.1	3	HD 22.10 S2
N01.13	H2.19	Heat resistant (90°C) heavy duty flexible cables, with EPR elastomeric insulation and TPU sheath	H07BQ-F	2011-05-01	2014-01-17		7.2	4	
N01.14	H2.20	Heat resistant (110°C) ordinary duty flexible cables, with EVA insulation and sheath	H05GG-F H05GGH2-F	2011-05-01	2014-01-17	EN 50525-2-21	8.1	3	HD 22.11 S2
N01.15	H2.21	Heat resistant (90°C) ordinary duty flexible cables, with EPR elastomeric insulation and sheath	H05BB-F	2011-05-01	2014-01-17	EN 50525-2-21	6.1	3	HD 22.12 S2
N01.16	H2.22	Heat resistant (90°C) heavy duty flexible cables, with EPR elastomeric insulation and sheath	H07BB-F	2011-05-01	2014-01-17		6.2	4	
N01.17	H2.23	Heat resistant (90°C) ordinary duty flexible cables, with EPR elastomeric insulation and CSP sheath	H05BN4-F	2011-05-01	2014-01-17	EN 50525-2-21	6.3	5	
N01.18	H2.24	Heat resistant (90°C) heavy duty flexible cables, with EPR elastomeric insulation and CSP sheath	H07BN4-F	2011-05-01	2014-01-17		6.4	6	HD 22.12 S2
N01.19	H2.25	Heat resistant (90°C) heavy duty multicore flexible cables, with EPR elastomeric insulation and CSP sheath	H07BN4-F	2011-05-01	2014-01-17		6.5	7	
N01.20	H2.34	Water resistant heavy duty flexible cables, with crosslinked elastomeric insulation and PCP or equivalent sheath	H07RN8-F	2011-05-01	2014-01-17	EN 50525-2-21	5.1	3	HD 22.16 S2

Ref.	Ref.	Type description	Code Designation	Starting or beginning for updating licences	Deadline for updating licences		Clause		Harmonization	
(EN)	(HD)					Standard	EN	HD	document	
N01.21	H2.35	Water resistant, heavy duty, multicore flexible cables, with crosslinked elastomeric insulation and PCP or equivalent sheath	H07RN8-F	2011-05-01	2014-01-17	EN 50525-2-21	5.2	4	HD 22.16 S2	
N01.22	H2.31	High flexibility braided cables with cross linked elastomeric insulation	H03RT-H	2011-05-01	2014-01-17	EN 50525-2-22	4	6	HD 22.14 S3	
N01.23	H1.5	Single core non- sheathed cables with thermoplastic PVC insulation, solid or flexible conductor for internal wiring	H05V-U H05V-R H05V-K	2011-05-01	2014-01-17	EN 50525-2-31	EN 50525-2-31	4.3 and 4.4	4 and 5	HD 21.3 S3 + /A1:1999
N01.24	H1.6	Single core non- sheathed cables with thermoplastic PVC insulation, solid or flexible conductor for fixed wiring	H07V-U H07V-R H07V-K	2011-05-01	2014-01-17					4.1 and 4.2
N01.25	H1.7	Heat resistant (90°C) single core non-sheathed cables with thermoplastic PVC insulation, solid or flexible conductor for internal wiring	H05V2-U H05V2-K H05V2-R	2011-05-01	2014-01-17	- EN 50525-2-31	5.3 and 5.4	2	HD 21.7 S2	
N01.26	H1.8	Heat resistant (90°C) single core non-sheathed cables with thermoplastic PVC insulation, solid or flexible conductor for fixed wiring	H07V2-U H07V2-K H07V2-R	2011-05-01	2014-01-17		5.1 and 5.2	3	/A1:1999	
N01.27	H2.1	Heat resistant (180°C) single core braided cables, with crosslinked silicone rubber insulation for fixed wiring	H05SJ-K H05SJ-U	2011-05-01	2014-01-17	EN 50525-2-41	4.3	2		
N01.28	H2.2	Heat resistant (180°C) single core unbraided cables, with crosslinked silicone rubber insulation for fixed wiring	H05S-U H05S-K	2011-05-01	2014-01-17		4.1	3	HD 22.3 S4 + /A1:2006	
N01.29	H2.3	Heat resistant (180°C) single core sheathed cables, with crosslinked silicone rubber insulation for fixed wiring	H05SS-K	2011-05-01	2014-01-17		4.4	4		
N01.30		Heat resistant (180°C) single core unbraided cables, with crosslinked silicone rubber insulation for internal wiring	H03S-K	2011-05-01	2014-01-17		4.2			
N01.31	H2.10	Heat resistant (110°C) single core non-sheathed cables, with crosslinked EVA insulation for fixed wiring	H07G-U H07G-R H07G-K	2011-05-01	2014-01-17	EN 50525-2-42	4.1	2	HD 22.7 S2 + /A1:1999 + /A2:2004	

Ref.	Ref.		Code Designation	Starting or beginning for updating licences	Deadline for updating licences	Standard	Clause		Harmonization
(EN)	(HD)					Standard	EN	HD	document
N01.32	H2.11	Heat resistant (110°C) single core non-sheathed cables, with crosslinked EVA insulation for internal wiring	H05G-U H05G-K	2011-05-01	2014-01-17		4.2	3	
N01.33	H1.17	Oil resistant control cables with thermoplastic PVC insulation	H05VV5-F	2011-05-01	2014-01-17	EN 50525-2-51	4.1	3	HD 21.13 S1
N01.34	H1.18	Oil resistant screened control cables with thermoplastic PVC insulation	H05VVC4V5-K	2011-05-01	2014-01-17		4.2	4	+ /A1:2001
N01.35	H1.1	Flat tinsel flexible cables with thermoplastic PVC insulation	H03VH-Y	2011-05-01	2014-01-17	EN 50525-2-71	4	2	HD 21.5 S3 + /A1:1999 + /A2:2001
N01.36	H1.13	Flat divisible flexible cables with thermoplastic PVC insulation (for Class II luminaires)	H03VH7H-F	2011-05-01	2014-01-17	EN 50525-2-72	4	3	HD 21.11 S1 + /A1:2001
N01.37	H2.9	Arc welding cables with crosslinked elastomeric covering	H01N2-D H01N2-E	2011-05-01	2014-01-17	EN 50525-2-81	4	2	HD 22.6 S2 + /A1:1999 +/A2:2004
N01.38	H2.12	Cables with crosslinked elastomeric insulation for decorative chains	H05RN-F H05RNH2-F	2011-05-01	2014-01-17	- EN 50525-2-82	4.2	2	HD 22.8 S2
N01.39	H2.13	Cables with crosslinked elastomeric insulation for decorative chains used with designated lampholders	H03RN-F	2011-05-01	2014-01-17		4.1	3	+ /A1:1999
N01.40	H2.32	Heat resistant (180°C) multicorecore sheathed cables, with crosslinked silicone rubber insulation for fixed wiring	H05SS-F H05SST-F	2011-05-01	2014-01-17	EN 50525-2-83	4.1	3	HD 22.15 S2
N01.41	H2.33	Heat resistant (180°C) multicorecore sheathed cables, with crosslinked silicone rubber insulation for fixed wiring with strain-bearing element	H05SSD3-K H05SSD3T-K	2011-05-01	2014-01-17	EN 50525-2-83	4.2	4	HD 22.15 S2

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(EN)	(HD)						EN	HD	document		
	H1.9	Single core insulated cables for indoor decorative lighting chains	H03VH7-H	To be cancelled bef	To be cancelled before 2014-01-17			3	HD 21.8 S2		
	H1.10	Single core non- sheathed cables with rigid or flexible conductor for installation at low temperature	H07V3-U H07V3-R H07V3-K	To be cancelled before 2014-01-17				2 and 3	HD 21.9 S2 + /A1:1999		
2.	2. LOW VOLTAGE ENERGY CABLES OF RATED VOLTAGES UP TO AND INCLUDING 450/750 V CABLES WITH SPECIAL FIRE PERFOMANCE										
N02.01	H1.19	Light duty flexible cables with halogen-free thermoplastic insulation and low emission of smoke	H03Z1Z1-F H03Z1Z1H2-F	2011-05-01	2014-01-17	- EN 50525-3-11	4.1	3	HD 21.14 S1		
N02.02	H1.20	Ordinary duty flexible cables with halogen-free thermoplastic insulation and low emission of smoke	H05Z1Z1-F H05Z1Z1H2-F	2011-05-01	2014-01-17		4.2	4			
N02.03	H2.26	Heat resistant (90°C) heavy duty flexible cables with halogen-free thermoplastic insulation and low emission of smoke	H07ZZ-F	2011-05-01	2014-01-17	- EN 50525-3-21	4.1	3	HD 22.13 S2		
N02.04	H2.27	Heat resistant (90°C) heavy duty multicore flexible cables with halogen-free thermoplastic insulation, and low emission of smoke	H07ZZ-F	2011-05-01	2014-01-17		4.2	4			
N02.05	H1.21	Single core non-sheathed cable with halogen- free thermoplastic insulation and low emission of smoke, for fixed wiring (Type 1)	H07Z1-U H07Z1-R H07Z1-K	2011-05-01	2014-01-17	EN 50525-3-31	4.1 and 4.2	4 and 5	HD 21.15 S1		
N02.06	H1.22	Single core non-sheathed cable with halogen- free thermoplastic insulation, and low emission of smoke for fixed wiring (Type 2)	H07Z1-U H07Z1-R H07Z1-K	2011-05-01	2014-01-17		4.1 and 4.2	4 and 5			

Ref.	Ref.	Type description	Code Designation	Starting or beginning for updating licences	Deadline for updating licences	Standard	Clause		Harmonization
(EN)	(HD)						EN	HD	document
N02.07	H1.23	Single core non-sheathed cable with halogen- free thermoplastic insulation and low emission of smoke, for internal wiring	H05Z1-U H05Z1-R H05Z1-K	2011-05-01	2014-01-17		4.3 and 4.4	6 and 7	
N02.08	H2.14	Heat resistant (90°C) single core non-sheathed rigid and solid cable, with halogen-free thermoplastic insulation and low emission of smoke, for fixed wiring	H07Z-U H07Z-R	2011-05-01	2014-01-17	EN 50525-3-41	4.1	2	HD 22.9 S3
N02.09	H2.15	Heat resistant (90°C) single core non-sheathed flexible cable, with halogen-free thermoplastic insulation and low emission of smoke, for fixed wiring	H07Z-K	2011-05-01	2014-01-17		4	4.2	3
N02.10	H2.16	Heat resistant (90°C) single core non-sheathed solid cable, with halogen-free thermoplastic insulation and low emission of smoke, for internal wiring	H05Z-U	2011-05-01	2014-01-17	- EN 50525-3-41	4.3	4	HD 22.9 S3
N02.11	H2.17	Heat resistant (90°C) single core non-sheathed flexible cable, with halogen-free thermoplastic insulation and low emission of smoke, for internal wiring	H05Z-K	2011-05-01	2014-01-17		4.4	5	22.9 33