Air conditioning & Refrigeration European Association

AREA

May 2006 Newsletter

Items covered:

President : J. JACQUIN - SNEFCCA F - e-mail : contact@snefcca.com
Past President : N. MITCHELL - RACG/HVCA UK - e-mail : ncm@normanmitchell.co.uk
Vice-President : Ch. SCHOLZ - VDKF D – e-mail : info@vdkf.org
Treasurer : J. HOOGKAMER - NVKL NL - e-mail : joh@fme.nl
Director : A. ZOLTAN – HKVSZ HU - e-mail : zoltan.attila@hkvsz.hu
General Secretary : R. BERCKMANS - AREA - e-mail : robert.berckmans@area-eur.be

Beau Site Première avenue, 88 • B -1330 Rixensart • Belgium • Tel : +32 2 6538835 • Fax + 32 2 6523872

May 9 was the European Union's day.

On the 9th of May 1950, Robert Schuman presented his proposal on the creation of an organised Europe, indispensable to the maintenance of peaceful relations. This proposal, known as the "Schuman declaration", is considered to be the beginning of the creation of what is now the European Union. The 9th of May has become a European symbol (Europe Day) which along with the single currency (the euro), the flag and the anthem, identifies the political entity of the European Union. Europe Day is the occasion for activities and festivities that bring Europe closer to its citizens and people of the Union closer to one another.

Editorial

Dear Members,

Item to be discussed in Berlin

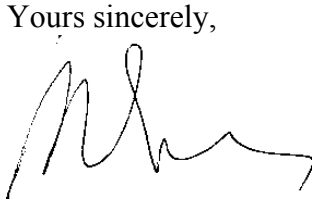
The e-mail communications have been lately quite intensive and the exchange of information quite heavy among the TEC and CQC participants : the reason is the interest in the F-gas Regulation and the possibility for AREA to influence the leakage detection standards and the minimum requirements for the training programmes and certification systems.

When we look at the attendance list for our coming Berlin meetings, we see 24 persons in the TEC and 27 in the CQC. It is good news, but on the other hand, it is not possible to have highly efficient meetings when we are too many.
It all started in October 2003, in a Brussels General Meeting : we decided to organize the Committee meetings, the day before the General Assemblies, in such a way that everybody interested can attend all meetings. At that time, we anticipated that Committees would meet more often than on the occasion of the biannual General sessions. It ends up to be only partially the case. The idea was to offer every six months the opportunity to have a broad forum allowing to learn from each other.

President Jacquin and I discussed this matter on May 1 and we believe that we could maybe come back to a limited number of participants in the Committees. Our President says 6 for instance plus the Chairman.

We propose to debate about it in Berlin and if a majority agrees, we can make a new list of the several Committees' participants. All AREA members would continue to be properly informed in the six-monthly General Meetings by the Committees' Chairs. Do not forget : the output of the Committees are essential to AREA and the Chairs need an active and manageable group to coordinate.

Yours sincerely,



Robert Berckmans
Secretary General

Environment

F-Gas Regulation issue

Finally, on April 25, 2006, the EU Council adopted the F-Gas Regulation and the MAC-Directive without any discussion as agreed in conciliation at the end of January.

PRESS RELEASE

COUNCIL OF
THE EUROPEAN UNION
Luxembourg, 25 April 2006
8593/06 (Presse 111)

The Council adopts rules on fluorinated greenhouse gases and on air conditioning in motor vehicles

The Council adopted a regulation on fluorinated greenhouse gases and a directive on emissions from air conditioning systems in motor vehicles, amending directive 70/156/EEC, following an agreement reached with the European Parliament in the conciliation committee (PE-CONS 3604/06 + 7786/06 ADD1 and PE-CONS 3605/06).
The legal acts are part of the European Climate Change Programme, established in June 2000, introducing cost-effective measures aimed at reducing emissions of fluorinated greenhouse gases (FGG) so as to contribute to the achievement of the European Community and member states commitments under the Kyoto Protocol, while preventing distortion of the EU's internal market.
The regulation, as redrafted in conciliation, addresses the containment, use, recovery and destruction of the FGG listed in Annex A to the Kyoto Protocol. It further regulates:
• the labelling and disposal of products and equipment containing these gases;
• the reporting of information on these gases;
• the control of uses of sulphur hexafluoride;
• the placing on the market prohibitions of products and equipment containing, or whose functioning relies upon, FGG; and
• the training and certification of personnel and companies involved in activities provided for by the draft regulation.
The directive applies specifically to FGG emissions from air conditioning systems fitted to vehicles. It establishes a gradual system of elimination of air conditioning equipment with a global warming potential higher than 150.

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EPEE, European Partnership for Energy and the Environment had a full day meeting at Brussels Airport on April 26.

EPEE members are worried about the Danish and Austrian initiatives in banning HFC in new equipment. They have asked the Commission (DG Environment) to re-evaluate the infringement proceedings in the spirit of the conciliation agreement. It appears that several MEP speak of personal reassurance from Commissioner Verheugen, Enterprise and Industry, Vice President of the Commission, that, when the legislation enters into force, he will propose the withdrawal of the proceedings.
Usually it might take a couple of months to publish an adopted legislation due to the translation work. If it is again the case, the F-gas Regulation may be printed in the Official Journal end of June – July 2006.

The entry into force 'EIF' happens 20 days after this publication. The Regulation shall apply from 12 months after the EIF date (except for article 9 – placing on the market and annex II).

A "transport" review will take place before 31 December 2007 to consider if it is appropriate to extend the Regulation, for instance to refrigerated lorries.

A general review will be ready 4 years after the entry into force.

The AREA secretariat has motivated the AREA Members (Technical and Competence Committees) to agree on minimum requirements for leakage inspection and training and certification of RAC personnel and companies. The ODS/CC Committee chaired by the Commission (DGF ENV) and composed of National Experts will have one year to publish those requirements.

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Second European Climate Change Programme
Plenary Meeting ECCP I Review
2.5.2006 in Brussels

Summary : courtesy of Mr. Hans Jurgen Korte of SOLVAY :

During the plenary meeting a stakeholder discussion about the final report for the ECCP I Review took place. The main results of the five working groups were presented and discussed: energy supply and demand; non CO2 gases; transport; agriculture and forestry.

There were about 80-90 participants present coming from EU governments, industry, NGOs and consultants.

The chair explained again the importance of this exercise

- to be less than 2 years before the first Kyoto commitment period will start
- to highlight what worked well, less well, how to improve and to prepare for post 2012
- to keep focus on policies and measures in placed, announced and planned
- to look at areas which are outside the emissions trading scheme today

The main discussions were about energy, transport issues as summarized in the draft report as well as about N20 emissions and their possible inclusion within the EU Emission Trading Scheme. Although there was a very short summary about F-gases and the future F-gas regulation in the draft report, this topic was neither presented in plenary nor there were any discussions about it.

Some more general findings were as follows:

- baseline projections (BAU scenarios) seem to have been too optimistic in some cases where there faster emission growth than expected
- implementation of ECCP I policies and measures has been variable amongst member states with the necessity to address what has worked where, why, why not
- some quite good forecasting in reductions in areas like waste, agriculture, forestry and industrial processes but the real areas of concern remain energy and transport emissions because still growing
- overall quite a mixed picture with a lot to do on national level to speed up implementation of planned policies and measures

Next steps:

- the final report will be published in **June 2006**; it will be a factual report about the ECCP I review which will also reflect opinions of stakeholders
- results of the report will be fed into the annual progress report of the Commission in **October 2006**
- a green paper will be published about options, policies and measures for post 2012 **in fall 2006**
- some results of the review will be used as an input for further review of monitoring measures

Education & vocational training

Leonardo da Vinci

The Refrigeration Craftsman project

AREA/Leonardo Project EUR/02/C/F/NT- 84604

Agreement N° 2002-4549/001-001LE2X

The Final Report

At last, Coordinator Jan Reijmers and Secretary Robert Berckmans met Mrs. Monika Holik, Head of Unit , Mrs. Rea Brunila, Project quality/content Controller and Mr. Michael Brown, Financial Auditor on May 12.
The feedback was very positive about the quality of the project. The Commission was particularly pleased with the on-going dissemination in various Member States to a wide range of stakeholders. We explained how we could benefit from the opportunity offered by the F-gas Regulation. They asked relevant questions like the way we are dealing with CEN to get our portfolio of activities taken into account in the standard about competence.
A positive outcome is that the Leonardo Administration is open to study any new AREA proposal, for instance in the scope of so called natural gases.

The Financial Officer is finishing his very thorough review of all declaration forms and expenses and he indicated that we would conclude in the coming weeks so that the final part of the grant could be funded.

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On May 10, CEN TC 182 took a Resolution in Vienna about the Revision of EN 13313 (Refrigerating system and heat pumps – Competence of personnel). Our Representatives in the TC, MM. J. Hoogkamer and L. Nordell, will give us their feedback in the TEC meeting in Berlin on May 18. The motivation of the AREA secretariat is to have CEN taking into consideration the minimum requirements set by AREA for the refrigeration craftsmen and TC 182 has decided to set up a Working Group to study amendments to the standard on competence of refrigeration personnel.

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Sector Organisations Develop New Formula for Vocational Promotion during EuroSkills 2008

Starting this April, the Dutch sector organisations of Refrigeration Engineering (NVKL) and the Green sector (VHG), the knowledge centres of Construction (Fundeon), Completion and Maintenance (Savantis), and the Graphic sector (GOC) have declared their intention to work on a new formula for the promotion of their trades during ***EuroSkills 2008****. For these first formats they will work closely with colleagues from various European countries. Our partner in the Development Work Group UK Skills will support the development of competition formats for Fashion (Design & Manufacturing), Cooking & Serving and Hospitality.*

EuroSkills 2008 will consist of vocational competitions and demonstrations in which hundreds of young professionals from all EU member states will participate individually and in teams. The event is a good addition to the skills competitions that yearly are organised nationally and internationally and in which a large amount of European countries participate. In the autumn of 2006 the competition formats should be ready, which will also include team competitions and assignments in which candidates fulfil a task as part of a process.

Tradition and innovation
The experience of the sectors and knowledge centres in participation in WorldSkills guarantees that for the sake of continuity the ' rules of the game' of **EuroSkills 2008** will not deviate too much from the global competitions. Nevertheless the sectors, experienced as they are, also see possibilities to reach innovation and adjustments. *Fred van Koot*, Manager Technical affairs of **EuroSkills 2008** about this balance between tradition and innovation: ' The competition rules of EuroSkills will be in line with the competitions that are already organised on a national and international level. This guarantees that candidates are able to prepare themselves on the ground of similar rules. But EuroSkills will also create innovation by offering different, supplementary competition and presentation models. For example, in cooperation with the branches we survey aspects of practising trades, in which there are cooperating or process related tasks.

Markets

Heat pumps

Source : IIR Newsletter April 2006
"The Swedish market for domestic heat pumps has developed greatly over the last 10 years, with over 100,000 HP being sold in 2004. Exhaust air HP are installed in more than 90% of all new family housing constructed.

In 2004, brine-water HP, of which ground source HP dominate, accounted for 65% of the market share.

Also, 2004 figures for Germany show 12,600 HP were sold, up 30% on 2003. They should be 15,000 in 2005. By 2020, industry sources expect this figure to reach 200,000.
HP in Germany account for approx. 5% of all new space heating installations in the new building residential sector, half of which use earth coils as a source."

Figures concerning Finland, are mentioned below in the Member States' section.

European legislation

WEEE Waste Electrical and Electronic Equipment Directive

The implementation in the Member States appears chaotic.

RAC installations are part of the scope in some countries and are outside the scope in other states. The Commission has been contacted by EPEE and also directly by AREA without receiving any answer. DG ENV, Mrs. C. Day, Director General, has issued guidelines but they are not followed as they are not legally binding.

In the April 26 EPEE meeting, the situation was again discussed. Several EPEE members blamed the fact that two different Directives, WEEE and RoHS (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment), with different legal bases, article 175 for WEEE and article 95 for RoHS, are considered to have the same scope. The RoHS Directive has an influence on the design of components and the different National treatments and interpretations are disturbing the Internal Market.

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Energy Performance of Buildings Directive

Directorate General Energy and Transport is opening a website to provide an information service to help with the implementation of the EPBD. Visit : www.buildingsplatform.org

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Directive concerning equipment and protective systems intended for use in potentially explosive atmospheres

ECSLA's lobbying position against the implementation of ATEX directive on ammonia plants

"Some national authorities are actually discussing the implementation of EC Directives concerning
equipment and protective systems intended for use in potentially explosive atmospheres to installations functioning with ammonia. A joint lobbying action is held at European level between ECSLA and CIAA to avoid this interpretation. Please find below some arguments you can use in front of your national authority in case of qualification of ammonia as explosive substance.

Ammonia has been used as refrigerant for more than 100 years. The majority of food and cold store operators are using **ammonia as refrigerant** because of its low energy consumption and its excellent thermodynamics properties.
Ammonia is environmentally friendly and has no Ozone Depletion Potential (ODP=0) and no Global Warming Potential (GWP=0).
Ammonia is classified in EN-378-1:2000 under category B2 (lower flammability) as opposed to hydrocarbons (propane, butane) classified under the category "higher flammability". Several reports and studies have proven that it is very difficult to ignite ammonia.
In EN378-3: 2000 – 6.2.4 it is indicated that "*Electrical equipment in rooms in which a refrigerating system containing ammonia is located, need* ***not*** *conform to requirements for hazardous areas.*"
There is no record of any known explosion due to an ammonia leak in a refrigeration plant in the EU. This record proves that ammonia as refrigerant can be considered as explosion safe and should thus not be covered by ATEX.
In order to ensure the continuous safe use of ammonia in refrigeration, our recommendation is to enforce EN-378-3:2000 in all EU Member States. This norm includes leak detection and automatic electricity switch off in case of leakage in a special machinery room. The fan motor and associated electrical equipment shall be of the explosion proof type or shall be located outside the special machinery room and the ventilation air stream. In addition, ammonia is extremely easy to detect by smell (at 5 ppm level)."

In Vienna, CEN TC 182 considered the question regarding the flammability of R717 from ECSLA and concluded that compliance with requirements of EN 378 will ensure that ignition of R717 will not occur.

Our Representatives in the TC, MM. J. Hoogkamer and L. Nordell, will report on this subject in the TEC meeting in Berlin on May 18.

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Directive 2006/32/EC of April 5 on energy end-use efficiency and energy services and repealing Council Directive 93/76/EEC

This Directive was published on 27 April 2006.
A copy in pdf format is available at the secretariat.

Member States

Finland

Information received from the Finnish Heat Pump Association :

European Heat Pump Statistics

Sales Figures and HP Stock: 2005

		Sales Figures			HP Stock in 2005
1.	**Space heating (residential and tertiary sector)**	<15-20 kW_{th} [1)]	>15-20 kW_{th} [1)]	**Total**	**Total**
1.1	Heating only [2)]				
	air / water			7	107
	water / water			0	
	brine / water	3.100	400	3.500	31500
	direct expansion / water			0	
	exhaust air / air [3)]			0	1000
	exhaust air / air + HX [4)]			0	
	exhaust air / water [3)]	1.800		1.800	9300
	exhaust air / water + HX [4)]			0	
	others [5)]			0	
	Subtotal heating only	4.900	400	5.307	**41.907**
1.2	Reversible (heating and/or cooling) [6)]				
	air / air [7)]	17.000		17.000	41000
	air / water			0	

	others [5)]			0	
	Subtotal reversible	17.000	0	17.000	**41.000**
	Total space heating	**21.900**	**400**	**22.307**	**82.907**
2.	**Tap water only heat pumps [8)]**			100	600
3.	**District Heating [9)]**				
4.	**Industrial Heat Pumps**				
	All Heat Pumps			22.407	83.507

Country:	**Finland**
Completed by:	Jussi Hirvonen
Date:	12/03/2006
Number of inhabitants :	5200000

European Heat Pump Statistics, Sales Figures 2005

1) Heating Capacity

2) Hot tap water can be provided by the same heat pump (or not).

3) Small heat pumps for heat recovery from domestic exhaust air.

4) Small heat pumps for heat recovery, integrated in central domestic ventilation units with heat exchanger.

5) Please specify on a separate sheet.

6) Must be able to provide heating in winter (can work below -7°C external temperature).

7) In Scandinavian countries primarily used for heating purposes.

8) Including small heat pumps for heat recovery from domestic exhaust air preparing only hot tap water.

9) Heating capacity >500 kW, smaller central heat pumps for heating several buildings have to be included under point 1.

General remarks for completing this form:

Please:

Fill in the coloured fields only.

Attach as much additional information and comments explaining the given sales figures as necessary and available.

Indicate any problems arising from the completion of this form on a separate sheet.

Norway

Norway's largest heat pump for upgrading low temperature energy

Source : EFCTC Newsletter – May 2006

Transferring energy from waste water to heat 9,000 flats: one of the world largest HFC-based compressors at the end of a 300-meter long tunnel in a hillside in central Oslo recovers heat from one of Oslo's largest sewage water channels and transfers it into the city's growing district heating system with a temperature of +90°C.
The refrigerant used in this heat pump is R134a, which is the only refrigerant available for such high temperatures in such a big unit. The outlet temperature is determined by the design conditions for the district heating system, where the temperature may go up to 120 °C in cold weather. The design return temperature is 60 °C, and the plant is using peak load boilers connected in series with the heat pump to increase the temperature from 90 °C up to the required temperature if necessary.
With a heating capacity of 18,4 MW, the Skoyen plant run by Viken Fjernvarme AS generates an annual heating capacity of 90 million kWh, enough to heat 9,000 flats or save burning 6,000 tonnes oil a year.
In the cavity, there is still room for an extension with a further heat pump to produce heating energy for up to 2'500 additional detached houses. The district heating network has a length of 193 km, connecting are more than 800 commercial customers and more than 2,300 detached houses.

News from our Members

AREA CZECH MEMBER

The Czech association SCHKT elected a new Board on April 25.

President = Mr. Ivan ZAHRADKA
Secretary General = Mr. Bohuslav SPACEK
Chief of TEC division = Mr. Jiri BROZ

AREA GERMAN MEMBER

The Bundesinnungsverband des Deutschen Kälteanlagenbauerhandwerks - BIV – has a new General Manager, Mr. Klaus ARNS.
The AREA Representative remains Mr. Peter BACHMANN.

Congratulations to all!

Events

EPEE will organize an energy event in the Autumn 2006.
The proposed date is October 3, in the afternoon.
The place should be the well known Concert Noble in Brussels.

The anticipated theme would be : "Eco-Partnership for Emission Reduction : Energy Efficiency The Solution".

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The **Slovenian Society of Refrigeration and Air Conditioning SDHK** announced its VIII th International Conference "Cooling systems : from design to installation" :

Portoroz, 10-11 November 2006

For information : tel. +386 1 4771 418, fax +386 1 4771 218, posvetovanje@drusvo-sdhk.si

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3rd CLIMATEWORLD MOSKOW
13-16 March 2007
International Exhibition Centre Crocus Expo

For information : fax +43 1 402 89 5454, climateworld@msi-fairs.com
www.climateworld.info

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IIR Conference

International Conference Ammonia Refrigeration Technology - for Today and Tomorrow
April 19-21, 2007 in Ohrid, Macedonia.

For information :
Pfor. Dr. Risto Ciconkov
President of the Organising Committee
ristoci@ukim.edu.mk
www.mf.ukim.edu.mk

Source : www.refrige.com :

"The 35th edition of Mostra Convegno Expocomfort, that was held in Milan (Italy) from the 28th of February to the 4th of March, was a success, according to "RPF" magazine. Comparing with its previous edition, this year the event received 170 000 visitors, more 13 per cent than last year. One of the organization's objectives for this year's edition was to balance the offer between the air conditioning and the refrigeration sector and that was accomplished with an increase in the presence of compressors' manufacturers.

Mostra Convegno Expocomfort 2006 took place in the new Exhibition Centre in Milan which offers a total area of 345 000 square meters. This year's edition of Mostra Convegno received visitors from 134 different countries: 30 000 foreign people visited the event, an increase of 15 per cent when comparing with last year's edition. Regarding the exhibitors, there was a significant increase of manufacturers coming from China.

Miscellaneous

Figures of general interest

The unemployment rate in the euro zone, with seasonal corrections, amounted to 8.2% in February 2006, compared with 8.3% in January. It was 8.8% in February 2005. The EU unemployment rate amounted to 8.5% in February 2006, unchanged compared to January. It was 8.9% in February 2005. In February 2006 the lowest rates were recorded in Ireland (4.3%), Denmark and the Netherlands (each at 4.4%), the United Kingdom (4.9% in December) and in Austria (5.1%). The highest unemployment rates were observed in Poland (17.0%), Slovakia (15.8%), Greece (9.6% during the fourth quarter 2005), France (9.1%) and Germany (8.9%).