



2009 EHF Women's 17 European Championship



Qualitative Analysis

1. Introduction

The 2009 Women's 17 European Handball Championship took place in Serbia from 25th June to 5th July. Sixteen teams played in this tournament; fifteen teams qualified by their achievements in qualification tournaments. These were: Russia, Sweden, Spain, Romania, Slovakia, Germany, Norway, Serbia, Croatia, Netherlands, Hungary, Czech Republic, Denmark, Lithuania and France. The team of FYR Macedonia qualified automatically because they were supposed to host the final tournament. The EHF reviewed its decision in April this year and gave Serbia the right to organize the tournament.

The Serbian Handball Federation and local organizers, although they had very little time, managed to organize the competition to a high standard. The tournament's matches (56) were played in two cities: Vrnjaczka Banja (Groups A and B) and Nis (Groups C and D). Matches of the final phase of the tournament (places 1-8) were played in the city of Nis. Sport facilities (arenas) were well prepared for the games. Accommodation of the players and officials, meals and transport did not raise any cause for concern. To sum up, organization of that tournament is to be rated very positively.

Results

Denmark won the tournament, defeating Russia 24:23 (10:16) in the final match. Both teams played against each other earlier in the group phase (group A). That match also was won by Denmark (31:27). The bronze medal in that Championship was won by the team of Norway, which defeated France 42:28 (20:14).

Table 1 shows the final classification of teams at the W17 ECh and the rankings from past two European Tournaments the same age category (Austria 2005 and Slovakia 2007). In that table, there are also classifications from the W19 ECh (Turkey 2007) and the senior EChs (Sweden 2006 and Macedonia 2008).

On the basis of the results, it turned out that there are only three teams which took part successfully in all six tournaments (DEN, RUS, ESP) and six others in five of them (ROU, FRA, CRO, HUN, SWE, GER).

The most credit goes to Denmark which won European Championship four times in all age categories (W17'05, W18EO'06, W19'07 and W17'09). These results indicate that in Denmark the quality of training is very high in all junior, youth and senior teams. Three medals were won by the teams of Spain, France and Russia; Romania and Norway have won medals twice. To date, the Netherlands is the only team that has won only one medal that was at the W17 '07 in Slovakia.

These results show that 18 medals were split between 7 national teams. Besides the Netherlands, other teams achieved medals two times or more, which means that the best teams in Europe are more or less on the similar level. Although the national team building ideas have an influence on the technical and tactical features of the player and teams.

Table 1: Results of the European Championships 2005 - 2009 with 16 teams in the final round

Place	Austria ECh 05 W17	Turkey ECh 07 W19	Slovakia ECh 07 W17	Serbia ECh 09 W17	Sweden ECh 06 Women	Macedonia ECh 08 Women
1	DEN	DEN	FRA	DEN	DEN	NOR
2	ROU	ESP	ESP	RUS	RUS	ESP
3	FRA	ROU	NED	NOR	FRA	RUS
4	SLO	SWE	RUS	FRA	GER	GER
5	SVK	FRA	SRB	HUN	HUN	ROU
6	CRO	SLO	DEN	NED	SWE	CRO
7	GER	RUS	SVK	SWE	CRO	MKD
8	HUN	HUN	CZE	ESP	POL	HUN
9	RUS	GER	NOR	GER	ESP	SWE
10	AUT	SRB	CRO	ROU	AUT	UKR
11	SWE	NED	SLO	CRO	DEN	DEN
12	LTU	NOR	AUT	SRB	MKD	BLR
13	ESP	POL	MNE	SVK	UKR	SRB
14	SCG	AUT	ROU	CZE	SRB	FRA
15	CZE	TUR	BUL	LTU	NED	AUT
16	TUR	LTU	UKR	MKD	SLO	POR

Physical parameters

Table 2 contains selected physical parameters (average and standard deviation values) characterizing players from the 2009 W17 ECh with regard to playing position. In addition to the height, weight and BMI of the players the table includes the number of international matches played before the ECh and also the age of players.

Players on left back and right back positions are the tallest players on the field (mean values are 1,79m and 1,76m respectively), next are goalkeepers (1,75m) and line players (1,74m). The smallest players are wingers (1,67m and 1,69m). These differences between back players and wingers are statistically significant, also those differences concerning body weight. There were no significant differences between mean values of age and number of international matches played before the tournament.

Anthropometric data have shown in Table 2 confirm a tendency characteristic for handball – despite of gender and age categories – left and right back players, pivots and goalkeepers (LB, RB, LP, GK) are tall (high strength and power levels, the range of arms) but winger players are noticeably smaller (high speed, very good agility). CB players (playmakers) are not strongly committed to physical parameters.

Table 2: Physical characteristics of the players on different positions (average and standard deviation)

Position	Body height [m]	Body mass [kg]	BMI	Int. matches	Age [years]
GK	1,75 ± 0,07	69,5 ± 8,5	22,8	8,7 ± 4,9	16,8 ± 0,47
LW	1,67 ± 0,05	59,4 ± 5,3	21,4	8,3 ± 5,8	16,7 ± 0,47
RW	1,69 ± 0,06	61,5 ± 5,2	21,5	8,5 ± 6,8	16,6 ± 0,70
PV	1,74 ± 0,06	68,9 ± 7,5	22,7	10,5 ± 6,1	16,7 ± 0,47
LB	1,79 ± 0,04	70,7 ± 6,9	22,2	9,1 ± 6,4	16,7 ± 0,52
CB	1,71 ± 0,05	63,3 ± 5,9	21,6	8,7 ± 6,1	16,6 ± 0,49
RB	1,76 ± 0,05	68,0 ± 5,9	22,1	10,1 ± 6,1	16,7 ± 0,55
Total	1,73 ± 0,04	65,9 ± 4,4	22,1	9,1 ± 0,8	16,7 ± 0,07

Table 3 shows the selected data characterizing players of the best teams at the 2009 W17 ECh (places 1 - 6). The tallest team in this classification is France (1,75m), the smallest one is the team of Norway (1,71m) but the difference is not statistically significant. Two teams (RUS and NED) significantly differ from the rest in an international experience. Russia is even the most differential team in terms of age (see standard diversion). Players of Denmark, Norway and France played the most international matches before the W17 ECh.

Table 3: Physical parameters of the best 6 teams from the W17 ECh (average and standard deviation)

Team	Body height [m]	Body mass [kg]	BMI	Int. matches	Age [years]
DEN	1,74 ± 0,06	67,4 ± 6,4	22,2	13,0 ± 7,1	16,8 ± 0,4
RUS	1,74 ± 0,08	62,3 ± 9,4	20,7	5,6 ± 3,7	16,4 ± 0,9
NOR	1,71 ± 0,06	65,8 ± 5,2	22,5	15,6 ± 4,5	16,8 ± 0,4
FRA	1,75 ± 0,05	66,1 ± 6,5	21,5	14,4 ± 7,8	16,8 ± 0,4
HUN	1,74 ± 0,03	64,9 ± 5,3	21,5	11,1 ± 5,7	16,9 ± 0,4
NED	1,74 ± 0,06	65,3 ± 4,5	21,6	3,9 ± 3,1	16,8 ± 0,4
Total	1,74 ± 0,01	65,3 ± 1,7	21,7	10,6 ± 4,8	16,7 ± 0,2

Team dynamics

Match dynamics are shown in table 4. During the Preliminary Round 16 of 24 matches ended with score difference greater than 6 goals. This shows that there were significant differences between contesting teams. The most of games in this tournament (27 of 56) ended with score difference in area of 6 to 9 goals. There have been two ties only.

Table 4: Match dynamics (all 56 matches)

	Draw	1 - 2	3 - 5	6 - 9	>10	
Preliminary	1	4	3	9	7	24
Main	1	2	2	4	7	16
Semi-finals		2	6	3	3	12
Finals		2	1		1	4
Total	2	10	11	16	17	56

Draw or win by 1-2 goals: (12) 21% matches
 Win by 3-9 goals: (27) 49% matches
 Win by >10 goals: (17) 30% matches

The results under dichotomy conditions:

- draw or win by 1-5 goals: (23) 41% matches
 - win by >6 goals: (33) 59% matches

Table 5: Development of the scores in preliminary and main round (teams ranked 1 – 6)

Rank	Team	Preliminary	Main	Total
1	DEN	29:21 (14:11)	30:23 (13:12)	29:22 (14:11)
2	RUS	32:26 (15:12)	30:26 (16:12)	31:26 (16:12)
3	NOR	28:23 (17:12)	30:29 (15:14)	29:27 (16:13)
4	FRA	32:26 (17:12)	29:33 (15:17)	30:30 (16:14)
5	HUN	41:30 (17:14)	30:31 (14:15)	35:31 (16:15)
6	NED	31:27 (15:14)	27:32 (13:15)	29:30 (14:15)
		+6 (+3)	0 (0)	+3 (+2)

Among the teams ranked 1-6 only 4 (DEN, RUS, NOR, HUN) had a positive goal difference (balance of goals) throughout the tournament. In the preliminary round, all the top teams had a positive goal difference, with an average of 6 goals per game, while in next round only 3 (DEN, RUS, NOR) preserved the positive balance. The Netherlands, ranked 6 at the ECh, had a negative goal difference throughout the tournament.

Best offence: HUN 35 goals/match

Best defence: DEN 22 goals/match

2. General trends

Defence systems

The basic defence system, which was dominant during the ECh, was set to 6:0. The majority of matches began with this defence system. The Scandinavian teams (DEN, NOR, SWE) only occasionally decided to nominate a forward defender and run game in a 5:1 system. In fact, only Spain throughout the tournament played in the defence system of 3:2:1 (at times 5:1). France and Netherlands usually started the game defending in setting 5:1 (with later transition to 3:2:1), but also frequently used 6:0 defence from the beginning of the match. Among the teams ranked places 8-16, defence strategies set to 5:1 were sometimes used by Romania, Croatia and Germany.

In some cases, which were dependant on tactics in special circumstances, teams playing 6:0 defence as a basic system (RUS, HUN, CRO, ROU), decided to use more or less open defence (5:1, 4:2 or 3:3) and combined defence (4+2 or 5:1 +1).

Offence play

The basic setting for the positional attack was 3:3 (2 wingers + 1 pivot: left back, playmaker, right back). An extremely rare tactic used in this ECh was the set-up with two nominal pivots playing at the same time (2:2:2). The transition to such a setting usually was effected by a run-in of a winger or a back player.

Group tactics were very often limited to cooperation of two players from nearby positions: back player – winger or playmaker – pivot. Only several teams benefited from tactical solutions in attack involving more than 3 players: DEN, NOR, HUN, NED.

The top 6 teams of the ECh had three or more tall players (also left-handed) with a good throw from distance at left and right back positions. Very good cooperation between the back players and pivots should be especially underlined.

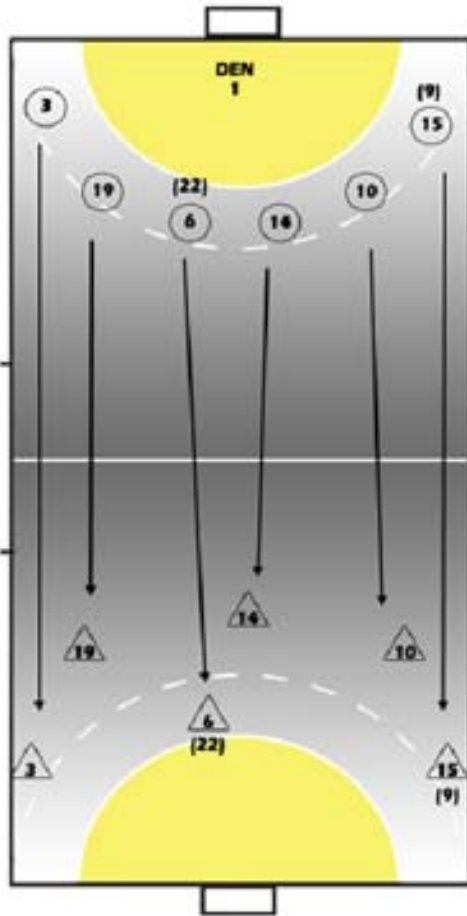
Fast break and fast throw-off

A number of teams that have reached the medal phase of the tournament were characterized by a very good organization of the game in terms of second wave fast break (RUS, DEN, NOR, NED). This element of game was very effective, especially in the first phase of the tournament, when the teams' technical level of skills has been quite varied.

The best teams were characterized by a very good defence against individual and group counterattack (fast back to defence after turnover). Several teams (RUS, DEN, NED) demonstrated great tactical skills, consisted in very fast settings for positional attack, after an unsuccessful second wave fast break. It allowed for goals to be scored easily when the defence is still disorganized.

Fast throw-off was another tactical element which was used very rarely during the ECh. Only the NED team thought to use the fast throw-off as a permanent tactic element, especially in the preliminary phase of the tournament. Other teams didn't use it at all (RUS, DEN, NOR) or only occasionally (e.g. HUN, CZE, SVK).

Defence and offense set-up of the highest ranked teams



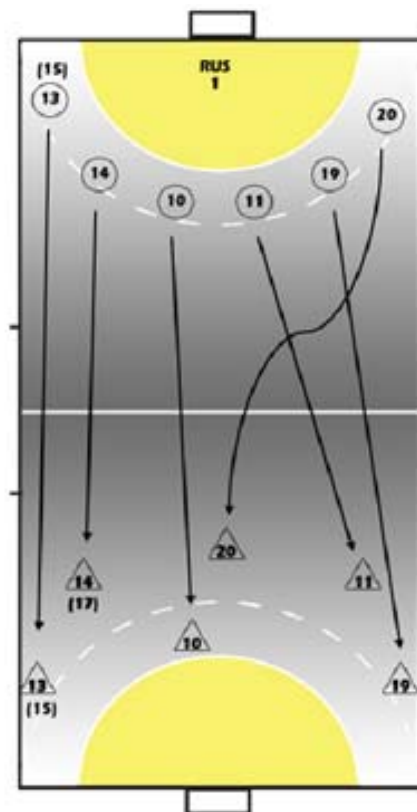
Three teams amongst those ranked places 1-6 at the W17 ECh (DEN, FRA, NED) proceeded from initial setup in defence to setup in attack without change of players positions (in straight line). The illustration on the left shows this situation using the danish team as example.

Such a setup implied the manner of moving out into a fast break, initiating with pass to back player (14, 19 or 10) and then a long crossing pass to winger.

For obvious reasons, weak performance could cause the coach to change the players during the course of match and also when setting the defence.

The different setting in defence was presented by Russia (picture on the right), in which the playmaker in attack was the last right defender (nominally 20, occasionally 13). In the first pass of the counterattack, the goalkeeper plays to the CB number 20, who runs along the 6m line to the middle of the court and later she determines how to play the fast break. If using 5:1 defence the playmaker (20 or 13) was the forward defender.

In other teams changes in the starting setup were rather small: in team NOR the playmaker defended on 5th position and in team HUN the pivot played on 2nd position in defence. With both these teams organization of a counterattack was not as strictly defined as in the Russian team.



Goalkeepers

The effectiveness of the goalkeepers' performance was crucial factor for the final success of the team. Very often, the key to success was to have two equivalently good players at this position (NOR, DEN, HUN, ROU). In the best teams during this ECh effectiveness of goalkeepers was more than 40% (without missed shots). Table 6 shows comparative information on the effectiveness of goalkeeper performance within the teams, which took places 1-6 and 7-16. Besides total efficiency, a statistically significant difference concerned shots from the wing positions (difference over 11%) and 7m throws (difference about 10%).

Table 6: Goalkeepers' effectiveness (%) into two groups of teams (place 1-6 and 7-16) and from various areas of shooting (only the best goalkeeper of the team was analyzed)

Team place	Total [%]	7m [%]	9m [%]	6m [%]	Wing [%]
1 – 6	39,4	26,2	56,0	31,5	52,0
7 - 16	34,1	16,6	52,4	27,9	40,9
Diff.[%]	5,3	9,6	3,6	3,6	11,1

However, apart from the effectiveness expressed in percent (%), extremely important to the final result of the match was effective performance in the crucial moments of the game where the outcome (win, draw, defeat) was still unknown. Goalkeepers who had that ability were playing for teams of Denmark, Russia and Norway.

Most of goalkeepers cooperated well with defence in relation to throws from the distance, especially with regard to straight line throws.

Physical parameters of players on this position are quite varied: tall goalkeepers (1.82-1.84 m) played in teams of Russia, Denmark and Slovakia (RUS, DEN, SVK); in most of the other teams the height of goalkeeper was between 1.68 and 1.75 m. For obvious reasons, physical features of a goalkeeper determined the way of playing (positional style) and the range of effective saves, particularly in relation to shots in the top part of the goal.

3. Findings and statements concerning probability of success

Based on the analysis of the performance of the teams which ranked places 1-8 in the ECh, it can be concluded that the basic technical and tactical elements characterizing world's leading teams (also in the success of seniors) are as follows:

- tall and physically efficient back players (at least 3, including 1 left-handed player), with a strong throw from the distance and able to make varied kinds of shots (from jump after one step, from a hanged jump, from the ground at the height of the head, from the hip);
- tall, well technically and tactically prepared line player (with ability to catch the ball by one hand), perfectly cooperating with back players (blocking, dividing the zone);
- excellent organization of a counterattack in the second wave, with the use of wrong setting of opponent's defence;
- immediate, fast return to the defence after turnover; the change of players (if necessary) occurs after stopping the game with a foul;
- very good goalkeeper (preferably two), playing individually, with great effect from the 6m line (1x1 and from the wings) and penalty throws;
- very well-prepared players in defence (the division of tasks, effective 1x1 game, cooperation with goalkeeper in terms of blocking shots).

The most common in building up attack were plays involving 2 or 3 players i.e. the cooperation of back player - pivot or winger - back player - pivot.

4. Detailed description of the teams (Top 6)

DENMARK

Results:

DEN 26 – 17 ROU
CZE 20 – 29 DEN
RUS 27 – 31 DEN
NED 19 – 32 DEN
DEN 34 – 23 SWE
DEN 30 – 25 NOR
DEN 24 – 23 RUS

Remarks:

- very good organization of positional attack – on both sides, with tendency to throw from wings; (*see video_1_Den*);
- technically very well-prepared wingers – a lot of attacks and also fast breaks were finished from this position (after 1 or 2 passes);
- proper organization of group fast break in second wave and fast switch to build up attack phase taking advantage of disorganized opponents' defence system; (*see video_2_Den*);
- a lot of place changes between the back players (good running phase) and lots of runs for second pivot position by wingers; (*video_3_Den; video_4_Den*);
- very good cooperation between back players – pivot and back player – winger; (*video_5_Den; video_6_Den; video_10_Den*);
- attack set-up 3:3, switched to 2:2:2 by wingers or back players; (*video_7_Den; video_8_Den; video_9_Den*);
- basic defence set-up 6:0, only very occasionally during the game was defence changed to 5:1 when the team played in numerical advantage;
- very good positional play in the goal and great cooperation with defence in terms shots from the distance; two good goalkeepers;
- excellent ball stealing and defence blocking in case of throw from distance;
- in a case of suspension team often plays with pivot (LP), without playmaker (CB) or left winger; (*video_6_Den; video_120_Den*);
- key players: 1 GK (C.Greve), 3 RW (A.Pedersen), 19 RB (L.Madsen); 10 LB (S.Pedersen), 18 LW (R.Ebbesen), 14 CB (M.Nesgaard Mogensen).

RUSSIA

Results:

RUS 35 – 24 CZE
ROU 23 – 35 RUS
RUS 27 – 31 DEN
SWE 26 – 27 RUS
RUS 32 – 25 NED
FRA 28 – 39 RUS
DEN 24 – 23 RUS

Remarks:

- very good organization of counterattack in first and, especially, in second wave (*video_1_Rus; video_2_Rus*);
- attack set-up 3:3, switched by run-ins for second pivot from back players (mainly RB), playmaker or wingers; (*video_3_Rus*);
- both left and right back players are tall and strong, with a good shot from the distance;
- playmakers (CB) are smaller, very fast and technically well-prepared, but sometimes with an individual play tendency;
- relatively weak play of wingers in positional attack;
- a lot of ground shots from standing position, especially from LB and CB;
- main tactics in defence set-up 6:0;
- good, formalized cooperation of a goalkeeper and defence when defending shots from the distance;
- good blocking in the centre of the field against jump and running shots from the distance;
- other options of defending set-up: sometimes transition from 5:1 to 3:2:1 or even 4:2; (*video_4_Rus*);
- good final result at the ECh, even though relatively few international matches before the tournament;
- key players: 20 PM (V. Divak), 11 LB (K. Milova), 17 RB (N. Danshina), 13 RW-PM (A. Vyakhireva), 14 LB-PM-RB (V. Garanina) 1 GK (D. Vakhterova).

NORWAY

Results:

NOR 33 – 19 GER
SRB 26 – 26 NOR
ESP 24 – 26 NOR
NOR 29 – 28 HUN
FRA 32 – 25 NOR
DEN 30 – 25 NOR
NOR 42 – 28 FRA

Remarks:

- similar organization of play in positional attack as the team of Denmark: lots of place changes between the back players and run-ins of wingers; (*video_1_Nor*; *video_2_Nor*);
- many ground shots from the distance, especially from positions of RB and CB;
- very good fast break, especially group second wave;
- good cooperation back players - pivot; (*video_3_Nor*);
- basic defence set-up 6:0; frequently when in numerical advantage set to 5:1, 3:3 or incidentally 3:2:1;
- good cooperation of goalkeeper with defence in the case of straight line shots;
- players are very well technically prepared and in terms of running skills;
- key players: 6 RB (A. Hensen), 4 LB (C. Rasmussen), 13 RW (S. Skogrand), 15 PV (S. G. Toerdal), 16 GK (M. Tommerbakke), 5 CB (M. Henriksen).

FRANCE

Results:

FRA 38 – 20 MKD
LTU 28 – 36 FRA
FRA 33 – 30 HUN
ESP 27 – 27 FRA
FRA 32 – 25 NOR
FRA 28 – 39 RUS
NOR 42 – 28 FRA

Remarks:

- positional attack set-up 3:3 with run-ins from side backs for second pivot; (*video_1_Fra; video_2_Fra*);
- very good cooperation back player - pivot; (*video_3_Fra*);
- fast back to defence after turnover;
- very good fast break in the second wave;
- under numerical advantage conditions very often used 5:1 defence and attack set-up with two pivots (2:2:2);
- basic defence: 6:0, 5:1 and occasionally 3:2:1, in a special situations, when losing a lot of goals to opponent - 4:2 or 4+2;
- among the top ranked teams low average performance of goalkeepers (about 30%);
- the team seemed to be not well prepared for such the hard tournament: the last two matches (semi-finals and the bronze medal match) France was defeated by 11 and 14 goals!
- key players: LB 9 (A. Bruneau), 4 PV (S. Abdellahi), 10 LW (C. Lassource), 20 RB (G. Zaadi), 7 RB (A. .Lozieme).

HUNGARY

Results:

HUN 42 – 32 LTU
MKD 24 – 50 HUN
FRA 33 – 30 HUN
NOR 29 – 28 HUN
HUN 24 – 31 ESP
SWE 32 – 35 HUN
HUN 35 – 34 NED

Remarks:

- attack set-up 3:3, when playing against aggressive defence 3:2:1 play with second pivot; (*video_1_Hun*);
- often use individual fast break (wingers and/or forward defender), but also counterattack in second wave;
- good cooperation between the back players and pivot; (*video_2_Hun*; *video_3_Hun*);
- the most diverse in defence: from 6:0 through 5:1, 3:2:1 for 5:1 for position and regular 5+1;
- cooperation of goalkeeper – defence only in addition to straight line shots;
- very tough, fighting team, playing to the end of the match, despite the score;
- relatively even team: two good players on positions: goalkeeper, winger, back players and pivot (weaker positions – RB and CB);
- key individuals: 15 LB (K. Klivinyi), 2 LW (O. Toth), 17 PV (G. Miko), 11 LB (V .Zsigmond), 6 CB (E. Toth)

NETHERLANDS

Results:

CRO 29 – 35 NED
NED 27 – 19 SVK
NED 32 – 33 SWE
NED 19 – 32 DEN
RUS 32 – 25 NED
ESP 29 – 31 NED
HUN 35 – 34 NED

Remarks:

- the only team that played the fast throw off as a basic tactical element (a lot of goals scored after this element of play, but a lot of turnovers, also);
- in positional attack the back players mainly play on straight line (*video_1_Ned*; *video_2_Ned*; *video_3_Ned*);
- good physical features of back players;
- very fast game played in attack, especially during first phase of the tournament;
- attempts to counterattack from every situation;
- varied defence play: basic 6:0 set-up, when in advantage set to 3:3 (*video_4_Ned*), from time to time 5:1 set as the initial set-up in defence (*video_5_Ned*);
- very good physical conditions of players, good running skills; little bit weaker positions: RW and LP;
- little experience of the players at international level before ECh;
- key players: 5 LB / PM (L. Abbingh), 7 LW (D. Hage), 17 LB / PM (E. Polman), 11 RW (A. Melestein).

TRENDS: The analysis focuses on the teams ranked 1 - 8

Defence:

- main defence 6:0 in most of teams (aggressive with close covering of a player with ball)
- varied defence set during the game (changing the defence at short notice to 5:1, 3:2:1, and using defence combinations 5 +1, 4 +2, 3 +3);
- good individual play in the goal (above 40%);
- cooperation defence - goalkeeper when defending shots from the distance on straight line;
- an excellent return and organization of defence after turnover;
- good defence blocking skills;
- high level of individual technical and tactical skills in defence;
- small, fast players, mostly wingers as the forward defender in 5:1 or 3:2:1 defence;
- two good goalkeepers in several teams;

Attack:

- powerful shots from the distance, often from ground;
- frequent position changes of back players in the preparatory phase of a gradual attack (crossing, double-crossing);
- very few games with the use of two nominal pivots (2:2:2 set-up);
- a perfect fast break in the first and second wave;
- frequent run-ins of wingers or back players;
- left-handed right back players with a powerful throw from the distance;
- fast throw-off rarely used;
- well technically prepared, fast wingers;
- individuals on back players positions (in a difficult situation taking responsibility for the solution in a positional attack, often playing individual);
- good organization of attack, especially when in numerical advantage;
- very good cooperation playmaker - pivot;

General remarks – weak points:

- lack of spectators;
- large disparity in sporting level of teams (4 groups):
 1. DEN, RUS, NOR
 2. FRA, HUN, NED, SWE, ESP, GER
 3. ROM, CRO, SRB, SVK, CZE
 4. LTU, MKD
- differing levels of refereeing: therefore it seems appropriate to start the tournament with a larger number of referee couples (12-13) and 8-10 in the main round;
- in their squads some teams had players specialized only in defensive play, which is not advisable at this stage of training players.

Jerzy Eliasz /POL

EHF Methods Commission

X:\Methods\ECh Analyses\2009\SRB\Eliasz_Women's 17 - Qualitative Analysis.docx