

**31 July 1996**

**Fax for BOBBY GOULD  
From KEITH LYONS**

**Dear Bobby**

**Gareth Potter was doing some summary material of the Euro 96  
knock out games. I have faxed it to you out of interest.**

**Best wishes**

**Keith**

## **Real -time analysis of Euro '96**

### **Game Content of the Knockout Stages**

#### **Introduction**

Euro '96 was the largest sporting event in England since the 1966 Soccer World Cup. It involved 16 countries in four pools, contesting for eight places in the knock-out stages. In all there were 31 matches over a three week period in venues all over England. The holders at the start of the tournament were Denmark, who had defeated Germany 2 - 0 in Sweden in 1992.

No	Match	Score	Date	Venue	Referee
1	Spain v England	0 - 0	22 June	Wembley	Batta (Fra)
2	France v Holland	0 - 0	22 June	Anfield	Neathal (Spa)
3	Germany v Croatia	2 - 1	23 June	Old Trafford	Sundell (Swe)
4	Portugal v Czech Republic	0 - 1	23 June	Villa Park	Krug (Germany)
5	France v Czech Republic	0 - 0	26 June	Old Trafford	Mottram (Sco)
6	England v Germany	1 - 1	26 June	Wembley	Puhl (Hun)
7	Germany v Czech Republic	1 - 1	30 June	Wembley	Pairetto (Ita)

Table 1: General Match Information of Euro '96 Knockout stages

There were seven matches during the knock-out stages of Euro '96 - four quarter final matches, two semi-final matches and a final. There was no third and fourth place play-off. Only two of the matches were settled within normal time. The others went into "Golden Goal" extra-time and all then moved into a penalty shoot-out except for the final in which Germany scored the decisive goal within the first period of extra time. The scores in the above table are those within the ninety minutes, and all the corresponding data for these matches will be that collected within normal time.

#### **Match Timings**

In the seven knock-out matches, timings were recorded to accurately monitor the amount of injury time that was played by the referee over the standard ninety minutes, and the amount of time that the ball was in play.

The England match against Germany had the lowest total match time with only one minute fifty three seconds being allowed for injuries, substitutions and time wasting. The Czech Republic' match against the Portugese was the longest at 96 minutes 50 seconds.

Only one match in the final stages had a ball in play time in excess of one hour. The France v Czech match had a ball in play time of nearly 65% of the whole match time. This is over eight minutes more than the Germany - Croatia match (55.05%). This,

however, does not necessarily indicate that the larger ball in play time means more action for the supporters. The general consensus in the media was that the German match was far more entertaining than the French match.

No	Match	Match Time	Ball in Play Time	% Ball in Play Time	No. of Cycles
1	Spain v England	91m 47s	57m 59s	63.17%	105
2	France v Holland	93m 47s	56m 47s	60.55%	108
3	Germany v Croatia	94m 22s	51m 57s	55.05%	123
4	Portugal v Czech Republic	96m 50s	55m 11s	56.99%	123
5	France v Czech Republic	93m 21s	60m 18s	64.60%	114
6	England v Germany	91m 53s	56m 25s	61.40%	102
7	Germany v Czech Republic	93m 32s	53m 10s	56.84%	122

Table 2: Match Timings, Ball in Play Times and Cycles for Knockout Stages

The number of activity cycles within the matches varied from 102 to 123. This number is comparable to that which exists within other team sports such as rugby union, but the large ball in play time (approximately twice as much as in rugby union) would indicate that there is much less dead time between each activity cycles hence raising questions regarding the work/rest ratios within the two sports.

### Territory and Possession

No	Match	Team 1 Territory	Team 2 Territory	Team 1 Possession	Team 2 Possession
1	Spain v England	45m 49s (50%)	45m 58s (50%)	27m 33s (48%)	30m 26s (52%)
2	France v Holland	51m 55s (55%)	41m 52s (45%)	24m 08s (43%)	32m 39s (57%)
3	Germany v Croatia	48m 19s (51%)	46m 03s (49%)	26m 32s (51%)	25m 25s (49%)
4	Portugal v Czech Republic	56m 43s (59%)	40m 07s (41%)	31m 53s (58%)	23m 18s (42%)
5	France v Czech Republic	57m 02s (61%)	36m 19s (39%)	29m 40s (49%)	30m 38s (51%)
6	England v Germany	54m 46s (60%)	37m 07s (40%)	31m 07s (55%)	25m 18s (45%)
7	Germany v Czech Republic	45m 37s (49%)	47m 55s (51%)	30m 14s (57%)	22m 56s (43%)

Table 3: Territory and Possession for the Knockout Stages

In many invasive team games territory and possession are important indicators of winning performances but it would appear to be much less of a key factor within soccer. For instance, England (v Germany), France (v Czech Republic) and Portugal (v Czech Republic) all had a territorial dominance of about 60% but none of the three won their matches and only England managed a goal. In addition, both Portugal and England had a clear advantage in terms of possession but were still unable to turn this to their advantage. It appears that it is the **use** of the ball within the opposition half which is important rather than global quantitative figures.

### Attack Efficiency

In order to look at a team's attacking efficiency the number of times that the ball was played into the opposition penalty area was recorded. This included balls e.g. shots and crosses that would travel through the plane of the penalty area.

No	Match	Team 1 in Opp PA	Team 2 in Opp PA	Team 1 Efficiency	Team 2 Efficiency
1	Spain v England	55	37	0.00%	0.00%
2	France v Holland	41	32	0.00%	0.00%
3	Germany v Croatia	28	42	7.14%	2.38%
4	Portugal v Czech Republic	43	28	0.00%	3.57%
5	France v Czech Republic	46	22	0.00%	0.00%
6	England v Germany	44	28	2.27%	3.57%
7	Germany v Czech Republic	48	32	2.08%	3.12%

Table 4: Entries into the Opposition Penalty Area for the Knockout Stages

The striking feature of this data is that in the quarter-finals and semi-finals the two teams that progressed to the final had much the fewer attacking opportunities. The Germans entered the opposition penalty area 28 times in each of their matches against Croatia and England, while the Czechs had even fewer attacks with 28 against Portugal but only 22 against France. The total number of attacks was within the range of 68 to 92 but five of the matches were within 68 and 73 attacking opportunities.

The pattern is carried through to shooting (and header) opportunities. Germany had only 7 chances against both England and Croatia. The Czech Republic had only 5 against the Portuguese (their only shot or header on target in this match was their goal) and 9 against France. The most number of shooting opportunities created in one match was 14 by Croatia and 13 by Spain and France and in total there was no more than 24 shots at goal in one match, the least number was 16. The number of successful shots or headers was never into double figures and was as low as 3 in one match. This is between 19 and 43%.

The number of crosses and corners is also relatively invariant between 45 and 55 per match and the number of these that are successful is between 11 and 17, some 20 -

35%. The number of successful crosses/corners per team can be very low. In their two matches leading up to the final the Czechs only had 5 successful out of an attempted 32.

No	Match	Team 1 Shots and Headers	Team 2 Shots and Headers	Team 1 Crosses and Corners	Team 1 Crosses and Corners
1	Spain v England	2/13	3/11	5/24	8/31
2	France v Holland	3/13	1/8	4/23	7/25
3	Germany v Croatia	3/7	6/14	7/19	10/29
4	Portugal v Czech Republic	2/11	1/5	14/35	3/20
5	France v Czech Republic	1/9	3/9	11/33	2/12
6	England v Germany	3/10	2/7	10/31	4/14
7	Germany v Czech Republic	5/12	4/12	5/28	9/18

Table 5: Shots, Headers, Crosses and Corners for the Knockout Stages

### Throw-in Analysis

Whether or not the success of a team at throw-ins is key to winning performance is debateable but it does undoubtedly give the team the opportunity to begin an activity cycle with possession of the ball. Invariably teams do have good success rates since it is a fairly routine and controllable action. Where they may concede automatic possession is when they throw along the lines to gain ground or the long throw-in to the opposition penalty area in order to try and create a "crossing" opportunity.

No	Match	Team 1 Success	Team 2 Success	Team 1 Possessions	Team 2 Possessions
1	Spain v England	19/25	18/19	19	22
2	France v Holland	18/21	15/17	18	18
3	Germany v Croatia	9/14	21/26	14	24
4	Portugal v Czech Republic	18/19	11/11	18	11
5	France v Czech Republic	22/24	17/18	23	19
6	England v Germany	16/18	20/28	22	21
7	Germany v Czech Republic	20/22	23/31	28	25

Table 6: Success and Possessions at Throw-ins for the Knock-out Stages

### Passing Analysis

In total the number of passes attempted in the matches were between 683 and 890. The most number of completed passes were 405 by Holland against France and 404 by Portugal against the Czech Republic. The least number of successful passes was 192 by the Czech team in the final. The number of passes intercepted appears to be relatively constant, in six of the matches the figures were all between 163 and 185. The

exception was the final where only 147 possessions were conceded. In relative terms the constant data is even better reflected. In all the matches between 20 and 24% of the passes are intercepted by the opposition.

No	Match	Team 1 Success	Team 2 Success	Team 1 Lost	Team 2 Lost
1	Spain v England	301/389	344/437	88	93
2	France v Holland	265/346	405/501	81	96
3	Germany v Croatia	270/349	249/334	79	85
4	Portugal v Czech Republic	404/482	225/310	78	85
5	France v Czech Republic	370/468	335/422	98	87
6	England v Germany	399/486	296/385	87	89
7	Germany v Czech Republic	356/433	192/262	77	70

Table 7: Success and Interceptions of Passes for the Knock-out Stages

### Goal-Keeper Analysis

Again, whether or not the success of a team at goal-keeper passes is key to winning performance is debateable but it does undoubtedly give the team the opportunity to begin an activity cycle with possession of the ball or to gain a large area of ground through the long ball. For instance, in the Portugal v Czech Republic match, the Portugese built their passing sequences from their goal-keeper and hence had retained all their possession from the low-risk short pass of the goalie. Alternately, the Czechs maintained possession from less than fifty per cent of their goal-keepers passes because of the higher risk long ball.

No	Match	Team 1 Success	Team 2 Success	Team 1 Possessions	Team 2 Possessions
1	Spain v England	10/15	22/26	14	27
2	France v Holland	11/19	21/27	16	29
3	Germany v Croatia	11/26	11/20	19	24
4	Portugal v Czech Republic	18/18	9/20	26	9
5	France v Czech Republic	13/17	20/32	22	20
6	England v Germany	11/18	11/17	16	16
7	Germany v Czech Republic	16/17	6/24	32	6

Table 8: Success/Possessions from Goal-keeper Passes for the Knock-out Stages

### Free-Kicks & Penalties Conceded

Most free-kicks are conceded in the opposition half (may be due to off-side infringement) but no team has a consistent pattern. England only conceded 3 in their own half against Germany (15 in opposition half) but conceded 10 in own half against

Spain (only 4 in opposition half). The Czechs had a stable pattern of conceding about the same number of ~~penalties~~ <sup>free-kicks</sup> per half and in each half of the field.

No	Match	Team 1 Conceded	Team 2 Conceded	Team 1 Own PA	Team 2 Own PA
1	Spain v England	6 + 7	10 + 4	0	0
2	France v Holland	12 + 8	8 + 10	0	0
3	Germany v Croatia	9 + 15	9 + 10	0	1
4	Portugal v Czech Republic	14 + 19	11 + 11	0	0
5	France v Czech Republic	5 + 19	8 + 10	0	0
6	England v Germany	3 + 15	7 + 8	0	0
7	Germany v Czech Republic	10 + 6	7 + 8	1	0

Table 9: Free-kicks (own half + opposition half) and Penalties Conceded for the Knock-out Stages



# The Football Association of Wales



# Cymdeithas Bêl Droed Cymru

Patron: HER MAJESTY THE QUEEN  
President: B. FEAR  
Secretary General: D.G. COLLINS

Cefnogwr: EI MAWRHYDI Y FRENHINES  
Llywydd: B. FEAR  
Ysgrifennydd Cyffredinol: D.G. COLLINS

Plymouth Chambers, 3, Westgate Street, Cardiff. CF1 1DD. Tel: 01222: 372325 Telex 497363 Fax: 343961  
Siambr Plymouth, 3, Heol-y-Porth, Caerdydd. CF1 1DD. Tel. 01222: 372325, Telex 497363 Fax: 343961

*RG/see/Doc.433.1996*

*Mr Keith Lyons,  
Centre for Notational Analysis,  
University of Wales College,  
Cyncoed,  
CARDIFF. CF2 6XD*

*22nd July 1996*

*Dear Mr Lyons,*

*I should be grateful if you could please take a copy of the enclosed video and return it to me.*

*Many thanks for your co-operation.*

*Yours sincerely,*

*Bobby Gould,  
International Team Manager.*

*Enc.*