International Hockey Federation

Hockey Research 2015 – 16

Sportsurf seminar - Loughborough University

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Hockey is

**INCLUSIVE**
- 50/50 male/female sport
- Strong continental representation
- 132 National Associations
- Played for life with numbers growing at both ends

**FAN-CENTRIC**
- 200 million+ watched the 2014 World Cup on TV with rights sold in more than 80 countries
- Olympic sport on Facebook
- Ranked 3rd
- Moved to quarters in 2014 to improve fan experience

**OLYMPIC SPORT**
- First played in London in 1908
- Excellent anti-doping record
- 3rd biggest sport at 2012 Olympics in terms of ticket numbers sold, 630,000/97% sold

**Hockey has an AMBITIOUS STRATEGY**
- 10 year strategy
- 1 Ambition
- 4 Key goals
- 5 Major initiatives
- 4 Core values
Our 5 key initiatives

1. Fan-focused entertainment portfolio
2. World-class content creation & distribution
3. Joined-up global marketing
4. Commercial partners who share our vision
5. High Performing Sport

ENGAGE & EMPOWER
2015 – 2016

Projects:
1. Development of Hockey5s
2. Player perception study – hockey ball preferences
3. Hockey ball specifications

Guidance & assistance
1. Lighting standards – player perception survey
2. Player protective equipment
Development of Hockey5s

Trialled by FIH at 2014 Youth Olympics
Development of Hockey5s
Competition style Hockey5s court with stand-alone rebound boards.
Hockey balls
The research aim was to provide the evidence needed to inform decisions concerning future beneficial change in the game of hockey with respect to desirable ball performance standards and in particular:

- Ball Performance Factor Scoping
- Factor Importance Assessment
3.1 Stakeholder Maps

A stakeholder map (Figure 3) was identified based on discussions with the FIH and initial work conducted by Bolland (Bolland, 2015).
3.4 Player Coverage Map

The distribution of the nationalities of all players who participated in the interview and questionnaire phase of the study, as shown in Figure 7.

Figure 7: Nationalities of participating players: Australia (women); Austria (men); Belgium (men); Czech Republic (men); France (men); Germany (women); India (women); Ireland (men); Italy (women); Japan (women and men); Netherlands (women and men); New Zealand (women and men); Poland (men); Switzerland (men); Turkey (men); UK (women and men); Wales (men)
Findings and conclusions

6.3 Quantitative Study

6.3.1 Acceptance of Current Hockey Balls

i. By far the majority of players, across the range of sub-groups (gender, age, playing position) are happy with current balls.

ii. The only exceptions are:
   a. amongst senior players (>29) where most balls are considered unacceptable.
   b. amongst attacking players where most balls are considered unacceptable.

6.3.2 Importance of ball characteristics

i. In general, the participants were conservative in their assessment of all the characteristics considered: none were unimportant, none were of exceptionally high importance.

ii. The top 8 of 17 characteristics are fairly evenly ranked, with the top 5 being (from most to least):

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<td>a. visibility on the surface</td>
<td>d. speed on the surface</td>
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<tr>
<td>b. shape</td>
<td>e. hardness</td>
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<td>c. visibility through the air</td>
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Core values: the essential characteristics the ball should be adhered to be considered a ‘hockey ball’ for general use at any level should be set out in the rules.

- Mass
- Diameter
- Sphericity
- Visibility

Certified balls: requirements for balls intended for competition play:

- Centre of gravity
- Surface friction
- Durability
- Water absorption
Next Steps:

- Consultation with industry
- Incorporation into competition rules
- Structured player perception trials of “certified balls” to select supplier for FIH World Cup 2018 and 2020 Olympics

The future:

- Balls for 3G (and natural) turf that allow game to be played at higher speed.
Lighting standards

PPE standards
Wet fields – possibly our biggest challenge
Why do we water fields?

• More consistent ball control
• Surface pace
• Hockey-stick glides over surface – does not stick
• Allows players to slide
Average water use per person per day (Litres)

- Mozambique
- Hatti
- Ghana
- Kenya
- Bangladesh
- Water poverty threshold
- China
- India
- UK
- Germany
- Spain
- Mexico
- Japan
- Australia
- USA
- One watering of one hockey field

Rio 2016 = 76 games  = 1,368,000 litres

* Assuming no water application at half time
We wish to encourage manufacturers to develop dry – Global category surfaces

To do this we need to be able to:

• Accurately measure and quantity the characteristics of wet fields – **we need new measuring procedures**

• Set criteria for manufacturers to aim towards

At the same time do we need to review the way the game is played?

• Is the combination of water and yarn technology marking the game too fast?

• Can ball and stick technology overcome the need for water?

• Should we allow changes to clothing so carpet burns are not an issue?
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