



# final report

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## **Business development to enable early adoption of SmartStretch technology and identification of value-added products and markets**

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#### Milestone

Assessment and communication with key companies in the broader industry showing general interest and provide MLA with a final report, including:

- Develop an adoption matrix with application versus company value proposition
- Communicate with industry on SmartShape and SmartStretch plans and potential industry collaboration
- Collate industry feedback and report plans with potential early adopters of the SmartShape technology.

Report to MLA on recommendations for the next phase of commercialization of the technology.

#### Success in achieving milestone

- A draft adoption matrix with application versus company value proposition has been developed based upon discussions with potential early adopter companies representative of the various sectors in the meat industry. The matrix remains as work in progress as it is subject to constant review and update. It is attached under separate.
- The adoption matrix is prioritised upon ‘early-adopter’ companies and has a greater focus upon the SmartShape technology as the SmartStretch technology remains subject to the completion of industry trials in NZ and threshold stretching research in both NZ and Australia. These industry trials and research are expected to be conducted during July/August.
- Plans are in progress to develop and complete MDC proposals with potential early adopters of the SmartShape technology. These early adopters include:
  - Gotzinger Smallgoods with a market focus upon food service companies for whole and sliced silverside products.
  - Chef’s Partner with a market focus upon retail and food service distribution markets for silverside products and (uncooked) roast beef and steak sandwich products.
- Communication plans have been developed based upon the expected progress of the industry trials and research.
  - The aim is to boost industry awareness, without raising expectations too far or soliciting more sales leads than can be handled by the resources of the project team. Thus communications have been selective and targeted to potential customers rather than holding general industry workshops.
  - When the SmartStretch technology is tested and ‘market ready’, and the technology value proposition demonstrated in several product applications, more generic communications will commence.
  - Meantime, interim communications with the Australian industry have been undertaken with key industry groups and involved key MLA managers as appropriate.
- **Key Communication Messages to the Australian Industry**
  - **Key Message 1** - The SmartShape technology is sufficiently developed for the commercial application to (cold-boned) beef products.
  - **Key Message 2** - The SmartShape technology is sufficiently developed for commercial application to (cold-boned) sheepmeat and goat products, however a retrofit is required for a smaller ‘white lady’ rubber insert in the prototype.
  - **Key Message 3** - The SmartStretch technology is subject to further applications research. This research for (hot-boned) beef is currently

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being conducted in NZ and shall subsequently be applied for hot-boned beef, sheep and goat meats in Australia.

- **Recommendation 1 - Work Plans**
  - **PHASE 1 July-September 2009**
    - Review by Project Team of adoption matrix with application versus company value proposition
    - Develop and complete MDC proposals with potential early adopters of the SmartShape technology.
    - Conduct additional SmartShape industry demonstrations.
    - Support NZ industry trials and threshold research for beef by FAS and CT.
    - Support threshold research for beef/sheepmeats by NSW DPI.
  - **PHASE II October – December 2009**
    - Confirm 'readiness of ANZ SmartStretch research' for industry demonstrations.
    - SmartStretch upgrade of the Australian prototype (as required)
    - Develop concept hot-boned products and present to prospective quality hot bone processors.
    - Conduct industry trials for SmartStretch for beef/sheepmeats with potential early adopter Australian processors.
    - Develop MDC proposals with potential early adopters of the SmartStretch technology in Australia
  - **PHASE III January – May 2010**
    - Conduct further industry trials for SmartStretch for beef/sheepmeats with key Australian industry and processor groups.
    - Determine the need for further R&D for the technology.
- **Recommendation 2 - Team Communications**
  - Communications to date have been via regular teleconference calls between the project team members.
  - It is critical that with the above forward plans for Australia complements any similar plans for NZ.
  - MLA should ensure that the Project Team members' understand their roles and responsibilities within MLA's Adoption Strategy and Commercialisation Plan's for the SmartShape and SmartStretch technology.

## **1. Adoption Matrix With Application Versus Company Value Proposition**

### **2.1 Target Sectors and Groups**

The matrix remains as work in progress as it is subject to constant review and update.

The adoption matrix is prioritised upon ‘early-adopter’ companies and has a greater focus upon the SmartShape technology as the SmartStretch technology remains subject to the completion of industry trials in NZ and threshold stretching research in both NZ and Australia. These industry trials and research are expected to be conducted during July/August.

Research for adopters of the SmartStretch and SmartShape technology was focussed upon potential ‘early-adopters’ in the following meat industry sectors:

- a. Primary processors such as abattoirs
- b. Value adders such as smallgoods groups
- c. Secondary processors such as boning rooms and portion controllers
- d. Wholesalers and distributors

In addition, information was sought from a range of both larger and smaller organisations with local and export markets for both cold and/or hot boned meat for a range of species including beef, sheep and lamb and goat.

### **2.2 Value Proposition**

Value propositions for SmartStretch and SmartShape were grouped under the headings of:

- **New products**  
New product examples include:
  - o SmartShape can provide value adders, portion control and wholesale groups with new raw and cooked portion controlled and ‘set weight’ products from lower value cuts of cold boned meat.
  - o SmartStretch can provide abattoirs with new ‘roasting’ format products from hot boned meat.
- **Improved quality**  
New product examples include:
  - o SmartShape can provide value adders with more uniformly shaped products which can be cooked more ‘evenly’ and improve product quality.
  - o SmartStretch may provide improvements to eating quality of hot boned beef for both export and local markets.
- **Cost savings**  
New product examples include:
  - o SmartShape can provide value adders with more uniformly shaped products which can be processed with increased yield and reduced wastage.
  - o SmartStretch may provide improvements to eating quality of hot boned beef, sheep and goat meats without the need to age the product in chillers and/or freezers.

### **2.3 Summary of Adoption Matrix**

#### **2.3.1 Early Adopters**

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- ‘Early-adopters’ of the technology should be targeted as key reference sites for SmartShape and SmartStretch technology. These sites should occur throughout all industry sectors.
- In particular, the ‘early-adoption’ of the SmartShape technology by portion control companies (such as Chefs Partner, Gotzingers and Beak and Johnsson) should be used as reference sites to attract interest in the technology by the other industry sectors especially the processing abattoir sector.
- As a result of recent progress in NZ, the priority is to focus on the beef industry applications for the SmartShape and SmartStretch technology.
- As the SmartShape technology is sufficiently developed for commercial applications, the priority industry sectors for demonstrations and early adoption should be as outlined below.

### **2.3.2 Higher Priority**

#### **a. SmartShape Technology for Cold-Bone Beef Applications**

- i. Value adders such as smallgoods groups
- ii. Secondary processors such as boning rooms and portion controllers
- iii. Wholesalers, distributors and other small and medium size business’s
- iv. Primary processors such as abattoirs

#### **b. SmartStretch Technology for Hot-Bone Beef Applications**

- v. Primary processors such as abattoirs

### **2.3.3 Moderate Priority**

#### **a. SmartShape Technology for Cold-Bone Sheepmeat and Goat Applications**

- i. Primary processors such as abattoirs
- ii. Secondary processors such as boning rooms and portion controllers
- iii. Value adders such as smallgoods groups
- iv. Wholesalers, distributors and other small and medium size business’s

#### **b. SmartStretch Technology for Hot-Bone Sheepmeat and Goat Applications**

- v. Primary processors such as abattoirs

## **2. Industry Communications for SmartShape and SmartStretch Plans**

### **3.1 Update on SmartShape and SmartStretch Technology**

#### **a. SmartShape Technology**

As discussed in previous Milestone Reports 4 and 5, the SmartShape technology has been demonstrated and trialed in plants of potential ‘early adopters’ in Brisbane. These trials have been for both smaller and larger companies and for beef only. The feedback from industry has been positive.

Further SmartShape trials have been conducted for sheepmeats and it has been found that the current prototype machine is suitable for the larger primal cuts from sheep and lambs (eg, forequarter). However the ‘white-lady’ rubber insert is too small and is unsuitable for the smaller primal cuts from the loin and the hindquarter.

As a result, the availability and timing associated with the manufacture of a new ‘white lady’ rubber insert for the prototype is under review.

#### **b. SmartStretch Technology**

NZ has recently completed a SmartStretch demonstration at a hot-boned bull meat plant. The demonstration appears to have been successful subject to product evaluation. Subject to the product evaluation, an in-plant trial is to be potentially conducted during August.

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This in-plant trial shall potentially be conducted at a time which will match the completion of threshold testing research at the end of July for hot boned beef in NZ.

### **3.2 Industry Communications**

#### **Key Communication Messages to the Australian Industry**

**Key Message 1** - The SmartShape technology is sufficiently developed for the commercial application to (cold-boned) beef products.

**Key Message 2** - The SmartShape technology is sufficiently developed for commercial application to (cold-boned) sheepmeat and goat products, however a retrofit is required for a smaller 'white lady' rubber insert in the prototype.

**Key Message 3** - The SmartStretch technology is subject to further applications research. This research for (hot-boned) beef is currently being conducted in NZ and shall subsequently be applied for hot-boned beef, sheep and goat meats in Australia.

#### **Industry Feedback**

Key MLA managers have been involved with interim communications especially with major processing abattoir groups. MLA managers' have noted that many of the processors have emphasised the need for MLA to provide 'realistic time estimates on the availability' of the research and technology. For this reason, communications in the processing industry have focussed upon the availability of the SmartShape technology rather than the SmartStretch technology. As per above, communications on the SmartStretch technology shall occur subject to the completion of the NZ SmartStretch research.

### **3. Summary of Work Plans, Resources and Team Communications**

#### **4.1 Work Plans**

The following is a summary of the work plans and is shown schematically at Appendix A.

- **PHASE 1 July-September 2009**
  - Review by Project Team of adoption matrix with application versus company value proposition
  - Develop and complete MDC proposals with potential early adopters of the SmartShape technology.
  - Conduct additional SmartShape industry demonstrations.
  - Support NZ industry trials and threshold research for beef by FAS and CT.
  - Support threshold research for beef/sheepmeats by NSW DPI.
- **PHASE II October – December 2009**
  - Confirm 'readiness of ANZ SmartStretch research' for industry demonstrations.
  - SmartStretch upgrade of Aust'n prototype (as required)
  - Develop concept hot-boned products and present to prospective quality hot bone processors.
  - Conduct industry trials for SmartStretch for beef/sheepmeats with potential early adopter Australian processors.
  - Develop MDC proposals with potential early adopters of the SmartStretch technology in Australia
- **PHASE III January – May 2010**
  - Conduct further industry trials for SmartStretch for beef/sheepmeats with key Australian industry and processor groups.
  - Determine the need for further R&D for the technology.

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#### 4.2 Project Team Resources

Requirement	Resource Allocation and Proposed
SmartStretch validation & NZ machine upgrade	Carnetech (CT), Fix All Services (FAS), NSW DPI
Business development (Australia)	Barry Lee
Demonstrations (Australia)	Edwina Toohey
Product development	David Carew/Lachlan Bowtell
Australian machine upgrade	Fix All Services
Australian machine support	Fix All Services and/or local engineering organisation
Commercialiser	Fix All (first 6 units only).
Cost/benefit study (further work)	Phil Green
Industry publications to enhance industry awareness	BDM, assisted by MLA

#### 4.3 Team Communications

Communications to date have been via regular teleconference calls between the project team members. However, it is expected that the need for more frequent and regular communications between the project team members, MLA and MWNZ shall increase.

It is critical that with the above forward plans for Australia complements any similar plans for NZ. MLA should ensure that roles, responsibilities and expectations are well-understood and agreed upon.

**APPENDIX A – FORWARD WORK PLANS**

	ACTIVITIES	RESOURCE	WHEN	STATUS		
				Phase I Jul-Sep 2009	Phase II Oct-Dec 2009	Phase III Jan-May 2010
1.1	<ul style="list-style-type: none"> <li>Review by Project Team of adoption matrix with application versus company value proposition</li> </ul>	MLA Project Team	15/7/09	In progress		
1.2	<ul style="list-style-type: none"> <li>Develop and complete MDC proposals with potential early adopters of the SmartShape technology.</li> </ul>	B Lee/T Byrne	31/7/09	MDC Proposals under draft with 2 MDC potential partners		
1.3	<ul style="list-style-type: none"> <li>Conduct additional SmartShape industry demonstrations.</li> </ul>	B Lee/E Toohey	31/8/09	Subject to prototype availability per 1.5	Target 3 MDC S/Shape projects	
1.4	<ul style="list-style-type: none"> <li>Support NZ industry trials and threshold research for beef by FAS and CT.</li> </ul>	FAS/CT/B Lee	31/8/09	NZ trials under review		
1.5	<ul style="list-style-type: none"> <li>Support threshold research for beef/sheepmeats by NSW DPI.</li> </ul>	NSWDPI/B Lee	30/9/09	NSW trials under review		
2.1	<ul style="list-style-type: none"> <li>Confirm 'readiness of ANZ SmartStretch research' for industry demonstrations.</li> </ul>	B Lee/ANZ Team	15/10/09		Subject to 1.4 and 1.5	
2.2	<ul style="list-style-type: none"> <li>SmartStretch upgrade of Aust'n prototype (as required)</li> </ul>	FAS/B Lee	31/10/09		Subject to 1.4 and 1.5	
2.3	<ul style="list-style-type: none"> <li>Develop concept hot-boned products and present to prospective quality hot bone processors.</li> </ul>	D Carew/ANZ Team/B Lee	31/10/09		Subject to 1.4 and 1.5	
2.4	<ul style="list-style-type: none"> <li>Conduct industry trials for SmartStretch for beef/sheepmeats with potential early adopter Australian processors.</li> </ul>	B Lee/NSWDPI	31/12/09		Target of at least 1 trial with an 'early-adopter'	
2.5	<ul style="list-style-type: none"> <li>Develop MDC proposals with potential early adopters of the SmartStretch technology.</li> </ul>	B Lee/MLA	31/12/09		Target of at least 1 MDC project	
3.1	<ul style="list-style-type: none"> <li>Conduct further industry trials for SmartStretch for beef/sheepmeats with key Australian industry and processor groups.</li> </ul>	B Lee/NSWDPI	31/3/10			Target of 3 MDC SmartStretch projects
3.2	<ul style="list-style-type: none"> <li>Determine the need for further R&amp;D for the technology.</li> </ul>	B Lee/ANZ Team	31/4/10			Report R&D & commercialis'n issues
3.3	<ul style="list-style-type: none"> <li>Final reporting</li> </ul>	B Lee	31/5/10			