

Dear Sir or Madam,

I thank the Government for the review of the Anti-discrimination acts which incorporate the Disability Discrimination Act 1992.

One thing I would like to see in the Anti-Discrimination Act is the addressing of sensory needs for people with disabilities such as autism. Sensory needs are so easily overlooked by most people because it does not affect most people. Some examples of what I am saying include:

- Lights: They may make no difference to most people but it makes a difference for people with autism.
- Audible push button doors: They may make no difference to most people travelling by train but it affects people like myself.

It is possible to see some of the limitations people who are in wheelchairs, as well as people who cannot see or cannot hear, have. It is not that simple for understanding the sensory needs of people with autism.

There is action taken to ensure the needs of people with physical or sensory disabilities are being met. But when it comes to people with autism and their sensory needs – it is not understood or is dismissed.

Here is a list of things that can cause problems for people with autism:

<p><b><i>“What are the common examples of autistic sensory sensitivities?</i></b> <i>Many people with autism have reported hurtful responses to the following (not all-inclusive) list of sensory sensitivities:</i></p> <ul style="list-style-type: none"><li>• <i>Hearing: Babies crying, dogs barking, cars backfiring, vacuum cleaners, school bells, fire alarms, police and ambulance sirens, certain high-pitched voices, food chewing, pencil tapping, fans and ventilation systems, music other than their own, the pronunciation of select words.</i></li><li>• <i>Visions: Too many colo[u]rs or a certain colo[u]r that is painful to look at, sunlight that is too bright, harsh overhead lighting such as halogen or fluorescent lights, alternating light and shadow (especially while driving) that creates a strobe light effect, attempting to transition from one environment to a different environment (e.g., moving from hardwood flooring to patterned carpet).”</i></li></ul> <p>Source: Stillman, W 2007, <i>The Autism Answer Book – More than 300 of the top questions parents ask</i> pp. 66-67, Sourcebooks, Naperville, Ill.</p>
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What is done in society to help people with sensory issues such as people with autism? I can think of nothing. However these are some ways to help:

### ***“Ways to help***

*Here are some ways you may be able to help a person with sensory sensitivity. Often, small changes to the environment can make a difference.*

*Three points to remember are:*

- ***be aware:*** *look at the environment to see if it is creating difficulties for people with an ASD. Can you change anything?*
- ***be creative:*** *think of some positive sensory experiences*
- ***be prepared:*** *tell people with an ASD about possible sensory stimuli they may experience in different environments.”*

<<http://www.autism.org.uk/sensory>>

The proposed DSM-V planned to be released next year has this as part of the criteria:

*“Hyper-or hypo-reactivity to sensory input or unusual interest in sensory aspects of environment; (such as apparent indifference to pain/heat/cold, adverse response to specific sounds or textures, excessive smelling or touching of objects, fascination with lights or spinning objects).”*

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<http://www.dsm5.org/proposedrevision/pages/proposedrevision.aspx?rid=94#>

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I am listing some concerns of visual overload as well as the Disability Standards for Accessible Public Transport 2002.

### **Visual Overload**

The visual overload has increased rapidly especially over the last five years.

Some of the areas that have been impacted include:

- Incandescent lighting is replaced with compact fluorescent lighting.
- More incandescent traffic lights are being replaced with LED
- LED is being used in technology such as laptops

Most of the visual overload has to do with energy efficient lighting sources (such as halogen, CFLs and LEDs).

There are so many things going on and there is no limitation. I have personally written to Big W and Morayfield Shopping Centre in relation to problems with sensory overload. Nothing has been done about the problems since and it is like a losing battle.

I am fully aware of the reasons why the Government is phasing out the standard incandescent lighting. The following are from the Federal Government’s Department of Climate Change and Energy Efficiency website:

***“What is the total greenhouse benefit of the phase-out?”***

*It is expected that phasing-out inefficient incandescent light bulbs will reduce Australia's greenhouse emissions by 28 million tonnes between 2008 and 2020. This is equivalent to permanently decommissioning a small coal-fired power station or taking more than 500,000 cars off the road permanently.”*

*<<http://www.climatechange.gov.au/en/what-you-need-to-know/lighting/faqs/benefits.aspx>>*

***“How will the phase-out benefit Australian households?”***

*Changing over to compact fluorescent lamps (CFLs) will on average save households around \$50 per year on electricity bills, and is an opportunity for everyone to reduce their carbon emissions, and be part of the solution to global warming.*

*Compact fluorescent lamps (CFLs) may cost more per lamp (\$3 to \$6) but this extra initial cost will be offset many times through reduced energy use. In areas where lights are used a lot, savings from reduced electricity bills will cover the initial purchase within a few months.*

*It is important to note that compact fluorescent lamps (CFLs) are not being mandated. More efficient forms of incandescent lighting will continue to be available, such as mains voltage halogen lamps. Mains voltage halogens have a very similar appearance to the traditional incandescent light bulb, can be used in all of the same fittings, and are readily available. The halogen gas they contain allows them to operate at a higher temperature, which results in higher efficiency levels. However, mains voltage halogens are not as energy efficient as CFL alternatives.*

*Specialist incandescent lighting - for example, oven lights or lights used in specific medical applications - will not be phased out until cost-effective, efficient alternatives are available.”*

*<<http://www.climatechange.gov.au/what-you-need-to-know/lighting/faqs/cost.aspx>>*

The reasons that the Federal Government have to phasing out the standard incandescent light bulbs are to do with the environment as well as the cost benefits. Despite these benefits, there are people who are affected by the energy efficient lighting. Personally, I cannot tolerate any energy efficient lighting (halogen, CFLs, LEDs), but I can use standard incandescent lighting.

In regards to the environment benefits of energy efficient lighting, there are other ways to look after the environment without affecting people who need standard incandescent lighting (not halogen).

The Federal Government says the following in regards to health concerns and energy efficient lighting:

*“As the phase-out plan is developed, the Australian Government will continue to consider health issues and examine options to address any significant concerns. This may include providing information about possible impacts and available alternatives.”*

<<http://www.climatechange.gov.au/what-you-need-to-know/lighting/faqs/health.aspx>>

Despite what the Federal Government says in the quote just above, there seems to be nothing to address the needs for people who need the old fashioned standard incandescent light bulbs (standard incandescent light bulbs do not include halogen).

If the quote above is closely examined:

- *“As the phase-out plan is developed, the Australian Government will continue to consider health issues and examine options”* – It does not appear that the Federal Government has considered autism and that people WITH AUTISM need standard incandescent lighting.
- *“To address any significant concerns”* – to most people it may not matter what lighting is used (standard incandescent, halogen, LED, CFLs). However, people who do not have the difficulties that I experience would not necessarily agree or comprehend my need for standard incandescent lighting. If the need is not understood or considered, it would not be deemed to most Neuro-typical people as a significant concern.
- *“This may include providing information about possible impacts and available alternatives.”* – Standard incandescent is the only lighting that is most suited to me and the availability of these bulbs are limited. No halogens, CFLs or LEDs work like standard incandescent lighting. .

The only light sensitivity that is addressed are the needs for people with lupus. This however, is a different light sensitivity issue to what people with autism need. People with autism can have problems with bright lights:

*“Some people with autism are hypersensitive to sound and may get very upset when they hear sirens or dogs barking. Others are fascinated by faint noises such as the ticking of a watch. To some, bright lights are distressing, while others will stare at bright lights for hours.”*

< <http://faculty.washington.edu/chudler/aut.html> >

This is some research done about the impact of phasing out of traditional incandescent light bulbs:

*Following a request for information an appeal went out via the NAS website asking how individuals with autism and their families would be affected by the removal of traditional light bulbs from sale. The appeal ran for six weeks and produced the following response.*

**Results**

*In total there were 43 responses - 20 adults and 23 children from across the whole spectrum of autism.*

- *41 of the 43 said they were severely affected by light sensitivity and had a seriously adverse reaction to new forms of lighting.*

- One said they were moderately affected.
- One said they were not affected.
- 35 said they were stockpiling supplies of the old-style incandescent lighting.

Narrative accounts included the following verbatim statements from respondents.

"I am unable to go into public places so have stockpiled supplies to use at home."

"I feel physical pain if exposed to new forms of lighting."

"The new lighting makes me feel sick and everything jumps about."

"Our son will react with an immediate panic attack if exposed to the new form of lighting."

"I cannot go to public buildings now - even the hospital is off limits."

<<http://www.autism.org.uk/working-with/leisure-and-environments/architects/light-sensitivity-and-autism.aspx>>

"A majority of individuals with autism are known to have a different sensory profile and may be highly sensitive to light frequency. Therefore the plan to ban incandescent light bulbs will be seriously detrimental to this already vulnerable group. It will adversely affect their health; their ability to dealing with day to day life and compound their social exclusion from society. In fact, it is arguably discriminatory that this ban is even being allowed to proceed knowing the likely adverse consequences and the absence so far of a safe and acceptable alternative. Research Autism is fully supportive of energy conservation but this should be thought through and not be at the expense of people on the autistic spectrum. Until safe products are developed based on good research, the existing bulbs should not be withdrawn."

<[http://www.researchautism.net/pages/about\\_research\\_autism/research\\_autism\\_press\\_office/research\\_autism\\_news\\_release\\_20090316](http://www.researchautism.net/pages/about_research_autism/research_autism_press_office/research_autism_news_release_20090316)>

Here in the following tables covers most of the visual sensory issues and suggestions that should be taken on board.

<b>Shopping Centres and individual stores</b>	
<b>Areas of Visual sensory</b>	<b>Suggestion(s) to address matters</b>
Store general lighting	<ul style="list-style-type: none"> <li>• use standard incandescent lighting or linear fluorescent (not extra bright fluorescent lighting)</li> <li>• even consider covering lights in addition</li> </ul>
Refrigerator/Freezer lighting	<ul style="list-style-type: none"> <li>• instead of LED lighting, use standard incandescent lighting or linear fluorescent (not extra bright fluorescent lighting)</li> </ul>
Display lighting (like used in some mobile	<ul style="list-style-type: none"> <li>• instead of LED lighting, use standard incandescent lighting or linear fluorescent</li> </ul>

phone kiosks)	(not extra bright fluorescent lighting)
Petrol price display	<ul style="list-style-type: none"> <li>• Use winding signs like Shell used to use before the red (I presume) LED</li> <li>• Otherwise have staff to manually slot in prices.</li> </ul>
Checkout lighting	<ul style="list-style-type: none"> <li>• Use covered lights as checkout lights</li> </ul>
Photography kiosks in shopping centres (usually doing baby photos)	<ul style="list-style-type: none"> <li>• Flashing lights need to be covered and confined to the area of the photography.</li> <li>• In Morayfield Shopping Centre the flash can be seen up to one-third of the mall (depending on its location).</li> </ul>

### **Public Places lighting (parks, churches, etc)**

<b>Areas of Visual sensory</b>	<b>Suggestion(s) to address matters</b>
Lighting	Use standard incandescent lighting or linear fluorescent lighting.

### **Main Roads and Transport**

<b>Areas of Visual sensory</b>	<b>Suggestion(s) to address matters</b>
LED traffic lights	<ul style="list-style-type: none"> <li>• Use incandescent technology in traffic lights</li> </ul>
Level crossing lights	<ul style="list-style-type: none"> <li>• Use incandescent technology in level crossing signals</li> </ul>
LED variable speed signs	Other technology has been used in the past that does not use LED.
LED signs advertising distance	These are only recent technology and thus I have no suggestions at this time. However LED technology should not be used.
LED billboards	Do not use LED technology for advertising signs.

### **Standard incandescent light bulb availability**

<b>Areas of Visual sensory</b>	<b>Suggestion(s) to address matters</b>
Phasing out of standard incandescent lighting	<ul style="list-style-type: none"> <li>• Abolish the phase out of standard incandescent lighting.</li> </ul>

### **Technology such as laptops, vacuum cleaners, etc**

<b>Areas of Visual sensory</b>	<b>Suggestion(s) to address matters</b>
LED lighting	<ul style="list-style-type: none"> <li>• Make available technology without LED lighting.</li> </ul>

### **Torches, Christmas lighting, etc**

Areas of Visual sensory	Suggestion(s) to address matters
Torches	<ul style="list-style-type: none"> <li>• Ensure that torches with incandescent technology can continue to be purchased.</li> </ul>
Christmas lights	<ul style="list-style-type: none"> <li>• Make incandescent Christmas lights readily available. (At the moment, I have not been able to see incandescent technology with the rapid increase of LED technology).</li> <li>• All Christmas lights in public places and shopping centres need to use incandescent technology.</li> </ul>

## Disability Standards for Accessible Public Transport 2002

*The DDA seeks to eliminate discrimination against people with disability as far as possible. The Transport Standards provide transport operators and providers with certainty about their obligations under the DDA. Compliance with the relevant requirements will provide operators with protection from a complaint of unlawful discrimination.*

*Access to public transport is crucial to the ability of people with disability, and their families and carers, to participate fully in community life. The Transport Standards also benefit many older Australians and parents with infants in prams who use public transport services.*

<<http://www.ag.gov.au/Humanrightsandantidiscrimination/Pages/Disabilitystandardsforaccessiblepublictransport.aspx>>

The Disability Standards for Accessible Public Transport 2002 was designed to remove barriers for people with disabilities when taking public transport. These standards have resulted in allocated wheelchair spaces, audible push button doors, Braille signs, on-board information screens, tactile indicators on train platforms and at bus stops.

The public transport system has become a place that causes sensory overload for people like myself. I can only mention about Queensland Rail Citytrain fleet as well as any bus services in Brisbane. The following items cause sensory overload and suggestions:

Aspect	Modes of Transport	Suggestion(s) to address matters
Bright orange destinations (bright lights)	Buses Trains	Replace the bright orange destinations with the old green destinations. Alternatively, use a manual winding system like the Queensland Rail ICE train still uses.
Audible push-button doors	Trains	Have an allocated carriage without this feature (e.g. 2 <sup>nd</sup> carriage of every 3 carriage train).

(loud noise)		Alternatively, have whole train sets without these features. Currently the ICE train and some EMU services do not have these features – reserve some of these sets.
On-board information screens (bright lights)	Trains	Have an allocated carriage without this feature (e.g. 2 <sup>nd</sup> carriage of every 3 carriage train). Alternatively, have whole train sets without these features. Currently the ICE train and some EMU services do not have these features – reserve some of these sets.
Loud autovoice (loud noise)	Trains	Have an allocated carriage without this feature (e.g. 2 <sup>nd</sup> carriage of every 3 carriage train). The old Queensland Rail EMU autovoice is quite satisfactory to comply with this need. Alternatively, have whole train sets without these features. Currently the ICE train and some EMU services do not have these features – reserve some of these sets.

Currently the only trains I can take are the ICE sets and selected EMU fleet. Unfortunately the EMU range is lessening with more sets meeting the needs of the Disability Standards For Accessible Public Transport 2002. I have calculated that by mid-2013, I would only be able to take ICE sets.

Queensland Rail suggested that I should wear earplugs – but I have already tried a radio and I had to set the volume of that to uncomfortable levels just to minimise the effects of other sensory (audible push button doors, loud autovoice, etc).

### **What about common solutions (e.g. earplugs, polarised sunglasses, Irlen lenses, etc)**

I am very much aware that there is research into these methods to help people with autism cope from unwanted sensory (e.g. lights, sounds). However, I have not needed to use any of these and do not see that I should start wearing them because my sensory needs are not being met.

Why should I purchase Irlen lenses when all that is needed to be done in regards to visual sensory overload is to change the technology? Instead of apologies and understanding there needs to be changes in the lighting. Replace compact fluorescent lights, halogens and LEDs with standard incandescent lights.

Also, consider this:

- How many people in shopping centres wear hats, sunglasses, etc inside the shopping mall?
- How many people wear earplugs in the train?



People who do these things are in the minority (as most people do not wear them).

There is no guarantee that Irlen lenses will work for me. Whereas changing the lighting technology will work. In further looking at Irlen lenses was the following information:

***Q: If a person is experiencing perceptual problems, is it helpful to change the person's environment?***

***A: Yes. There are some simple and easy things that a parent can do at home or a teacher can do in the classroom. Let's start with lighting. The most comfortable lighting for individuals with Irlen Syndrome is indirect natural lighting or incandescent lighting. Therefore, minimize fluorescent lighting.***

< <http://irlen.com/index.php?id=93> >

## **What have I done about the problem?**

With the sensory overload happening in society I have done the following:

- I have a standard incandescent light bulb collection – so far it is totalling over 7000 (should be at least 8000 by the end of 2012).
- I have written about my concerns to TransLink, Big W, Morayfield Shopping Centre as well as to the Queensland and the Federal Government.
- I have tried polarised sunglasses to address the bright lights but they failed. I won't waste any more money on questionable items such as Irlen lenses.
- I have tried a radio with earpieces on the train only to have that fail as well.

## **Conclusion**

I hope that the Anti-discrimination legislation will consider the needs of people with sensory difficulties such as those people with autism.

If it is included, I would be looking forward to a life with a lot catering for my sensory needs.

- Public places will not become a burdensome place because of distressing noises and lights.
- Any lighting would need to comply with standards

If it is not included, I would like to know:

- Why these measures are not implemented?
- What would need to happen before they will be included?

Yours faithfully,

Jason Stehn.